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ABSTRACT

One of a series of guides developed under the K-6 Teacher and Counselor Competencies in Career Education Program, this guide contains a section for each of the Grades 5-6 levels (Fifth Experience Level and Sixth Experience Level), each encompassing the two career education components: Subject Matter Areas (to reinforce science, language arts, math, and social studies concepts) and Career Development Areas (with both developmental and interacting dimensions). Each experience level section contains eight infusion strategies (teaching units which fuse career development and subject matter concepts) based on the career developmental dimensions: Coping behaviors (two strategies), decision making (two strategies), lifestyle (one strategy), and self development (three strategies). (Separate teaching units are not included for the interacting dimensions; they are integrated into the suggested activities for the developmental dimensions). Each infusion strategy contains career development concepts, teacher goals, vocabulary, performance objectives, listings of subject matter concepts used, preplanning suggestions, student activities, student pages, reference to related materials, and job descriptions of the occupations presented. Cross indexing is provided so that infusion strategies may be located by occupational theme, subject matter topics, or career development area. (JT)

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CAREER EDUCATION GUIDE
(5-6)

by

Marla Peterson
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This guide
is one of a series
of three K-6 guides:

Career Education Guide (K-2)
Career Education Guide (3-4)
Career Education Guide (5-6)

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PREFACE

Materials of the project stress parallels between the lives of children and the lives of all other humans. The process of decision making is learned through making decisions whether one is a child in school or an adult in a specific occupation. So too are other career development concepts learned. One learns coping behaviors by being able to cope with situations in the here and now. Children at school are involved in an occupation, that of "school child" just as an adult may be in the occupation of tailor or chemist.

Visits were made to career education project sites, career education curriculum guides and career development theory were reviewed, commercial materials were examined, and people in various occupations were interviewed. Out of all these activities emerged the eleven career development major concepts and the seventy-six subconcepts around which the Enrichment of Teacher and Counselor Competencies in Career Education materials are built. Certainly more career development concepts exist. However, some priorities had to be established. With the help of a validation task force the staff was able to reduce the concepts to a manageable number.

Five textbook series were reviewed and concepts commonly presented at each experience level were identified for language arts, mathematics, science, and social studies. Once both career development and subject matter concepts were identified, teaching strategies were developed which infused the two types of concepts.

Teaching-learning activities have to have a "jumping-off" point. The project staff has chosen to use occupations selected from the fifteen USOE clusters of occupations as the agent to bring together career development and subject matter concepts. It is the philosophy of the project staff that at the K-6 level, in general, it does not matter which occupations are chosen. In fact, occupations do not have to be used. However, occupations are highly motivational in nature and serve as an excellent means to help students acquire career development and subject matter processes and content.

An honest attempt has been made to avoid sex and minority group stereotyping. Illustrations and text were reviewed by minority group members and representatives of women's groups. Some illustrations were redrawn and some text was rewritten. The authors invite all users who find any illustrations or wording that contain stereotyping to modify the materials. It was impossible for the staff to determine whether publications listed in the bibliographies contained stereotyping. The user should be alert to this possibility and review all materials listed in the bibliographies.

Throughout the development of this guide, students and teachers at Buzzard Laboratory School offered suggestions for improvement of the materials. Many children's suggestions are incorporated into this publication.

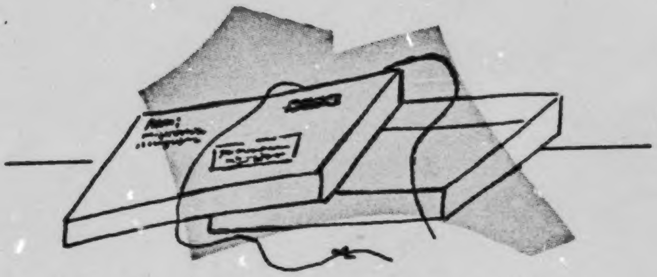
The vastness of the population for whom this publication is intended made it difficult to produce a document that would fit the needs of the entire population. Therefore, the staff expects that many adaptations will occur. This may be highly desirable because the professional classroom teacher is very adept at adapting.

--The Project Staff

ORIENTATION TO THE GUIDE

Dear Teacher,

You are about to be introduced to a promising innovation in K-6 curriculum--career education.



CAREER
EDUCATION

Put aside any pat ideas you may have.

Career education isn't just learning about jobs.

Career education isn't steering children into certain careers.

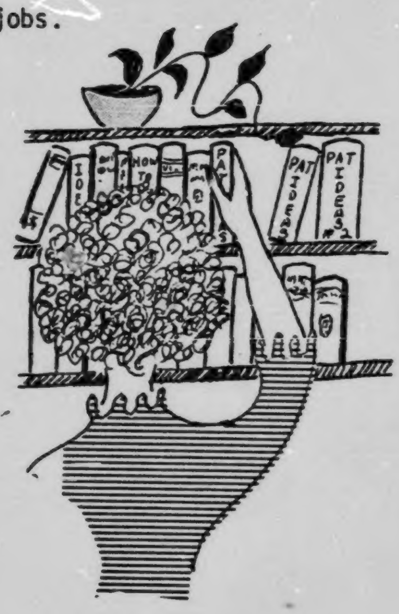
Career education doesn't force children to ask, "What do I want to be?"

You don't have to add a new class period called career education.

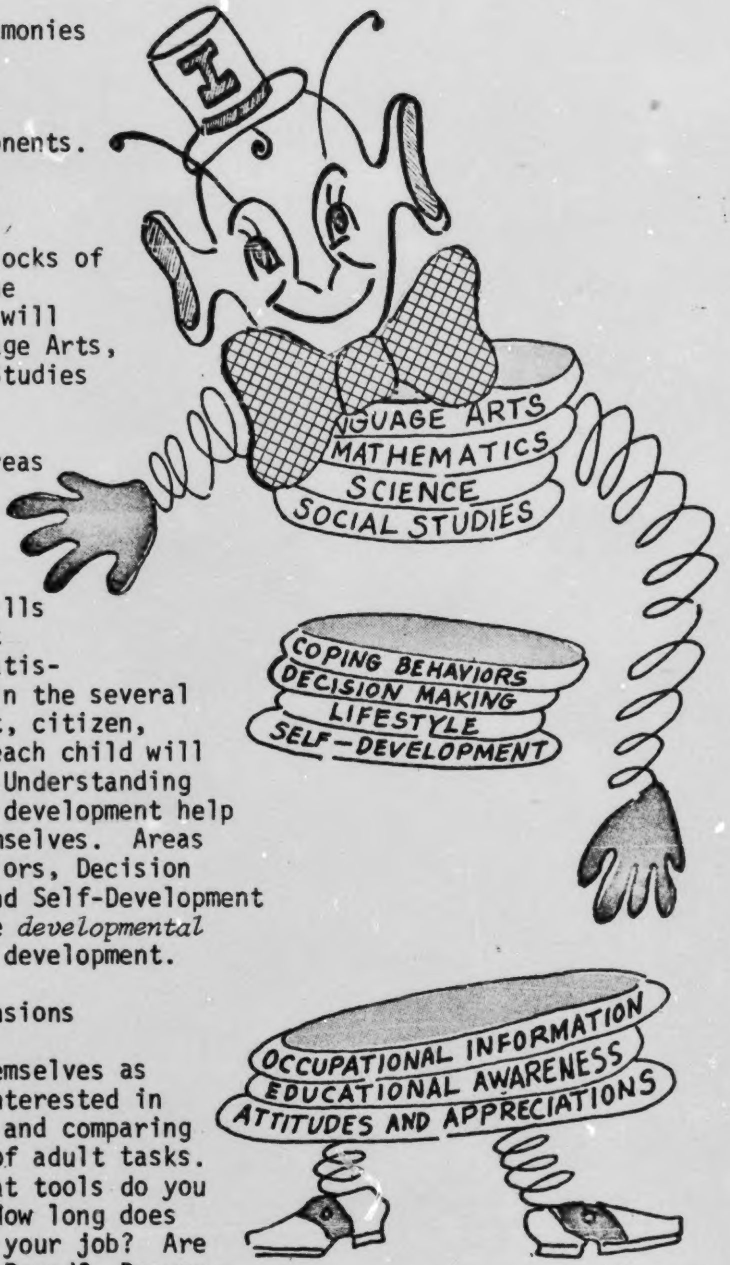
You don't have to buy new materials.

You don't have to change useful teaching methods.

CAREER
EDUC



INFUSION is the Master of Ceremonies for career education.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GUAGE ARTS
MATHEMATICS
SCIENCE
SOCIAL STUDIES
COPING BEHAVIORS
DECISION MAKING
LIFESTYLE
SELF-DEVELOPMENT
OCCUPATIONAL INFORMATION
EDUCATIONAL AWARENESS
ATTITUDES AND APPRECIATIONS

Career education has two components.

I. The Subject Matter Areas

These are the building blocks of every K-6 curriculum. The activities in this guide will reinforce Science, Language Arts, Mathematics, and Social Studies concepts.

II. The Career Development Areas

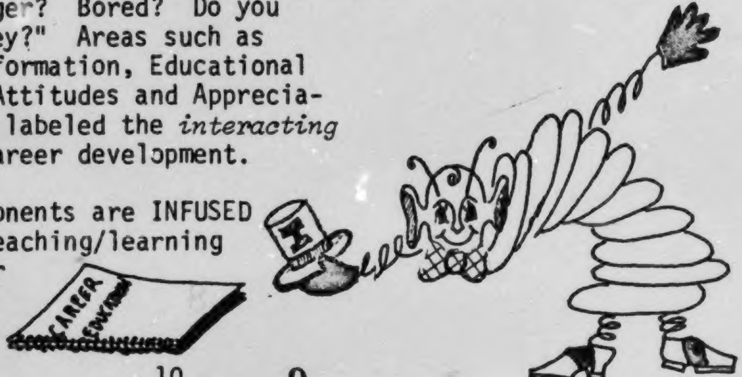
A. The Developmental Dimensions

Understanding and skills in career development guarantee personal satisfaction and success in the several adult careers (parent, citizen, worker, etc.) which each child will assume as an adult. Understanding and skills in career development help children to know themselves. Areas such as Coping Behaviors, Decision Making, Lifestyle, and Self-Development have been labeled the *developmental* dimensions of career development.

B. The Interacting Dimensions

Children think of themselves as workers. They are interested in knowing, trying out, and comparing the characteristics of adult tasks. Children wonder, "What tools do you use? Can I do it? How long does it take you to learn your job? Are you ever in danger? Bored? Do you make enough money?" Areas such as Occupational Information, Educational Awareness, and Attitudes and Appreciations have been labeled the *interacting* dimensions of career development.

When these components are INFUSED into a single teaching/learning activity, career education happens.


CAREER EDUCATION
I

Concepts

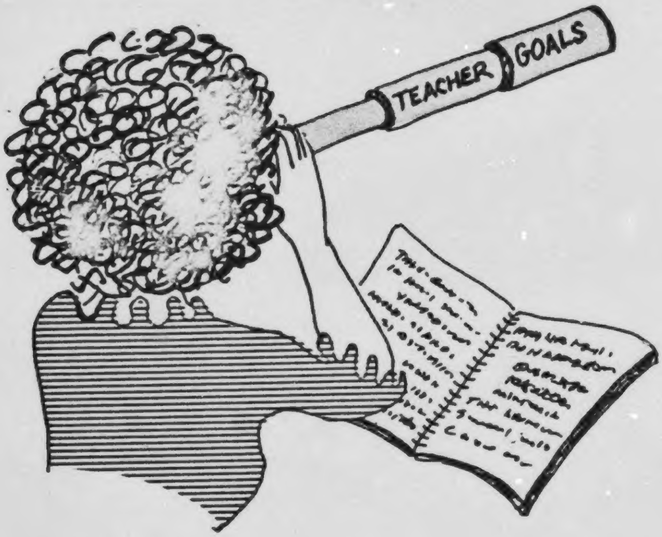
Subject matter concepts for the activities in this book were adapted from major textbook series.

Concepts for the developmental dimensions of career development are identified by one to three major concepts. Each major concept has K-6 subconcepts sequenced by increasing detail and difficulty according to experience level.

Concepts for the interacting dimensions of career development are more general and are the same at each experience level in this series.

Teacher Goals

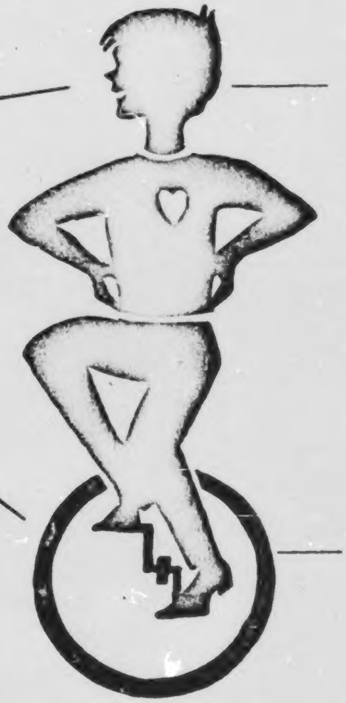
The career concepts lend themselves to a spectrum of teaching activities beyond the scope of those offered in this book. Teacher goals are provided so that you may preview and scan the teachability of a concept. The teacher goals will alert you to many ways to reinforce career concepts throughout the school day.



Objectives

You are correct if you assume that each career education activity has more than one objective. The activities have objectives from the two career education components--subject matter and career development.

There is a reasonable balance between the cognitive, affective, and psychomotor objectives.



Objectives appear in the discussion of an activity like this. PPO means Pupil Performance Objective.

Lifestyles within a community differ. **Lifestyle**	*. . . compile a list of ways to find out names and addresses of local nurseries.* PPO Use the yellow pages of the telephone directory as one source for locating nurseries in the immediate area.

The career concept toward which the objective was written is beside it in the left hand column.

Evaluation

The evaluation of pupil achievement after an infusion strategy (teaching unit) has been completed must depend primarily upon the sensitivity and judgment of the classroom teacher. The intelligent selection of means of evaluation has a direct relationship to the actual learners involved and the local conditions. For example, the classroom teacher is the best qualified person to decide whether a certain child should demonstrate a given knowledge "orally" or "in writing." The same consideration may be applied to the amount of knowledge or skill required.

Rather than prescribe a posttest, the present materials suggest that the pupil performance objectives for the infusion strategy activities be used as bases for the individual teacher's evaluation of pupil achievement. With these objectives and their corresponding activities as starting points, the teacher may decide to designate:

A CERTAIN NUMBER OF REQUIRED ACTIVITIES TO BE PERFORMED BY ALL PUPILS;

or, A CERTAIN NUMBER OF ACTIVITIES WHICH MAY BE TREATED AS ELECTIVES BY THE CHILDREN;

or, A COMBINATION OF REQUIRED AND ELECTIVE ACTIVITIES;

or, A WRITTEN, ORAL, OR PERFORMANCE TEST CONSTRUCTED ACCORDING TO THE CONTENT AND ACTIVITIES ACTUALLY EXPERIENCED BY THE CHILDREN.

ORGANIZATION OF THE GUIDE

You are probably very familiar with the content of the subject matter areas--mathematics, science, social studies, and language arts. However, career development content may be new to you and you may need to become familiar with career development concepts. For this reason, within each grade or experience level the guide is organized around the developmental dimensions--Coping Behaviors, Decision Making, Lifestyle, and Self-Development. Infusion strategies (teaching units) have been prepared which focus on a career development concept.

In case you are wondering what happened to the other three dimensions of career development, you will recall that they were called the interacting dimensions and they do just that--interact with the four developmental dimensions listed above. Separate teaching units have not been written for the interacting dimensions concepts. Interacting dimensions concepts have been integrated into the suggested activities for the developmental dimensions.

Each experience level has been tabbed so that you can quickly find the experience level(s) that are appropriate for your students. Within each experience level you will find eight infusion strategies. The infusion strategies follow the same pattern for experience levels:

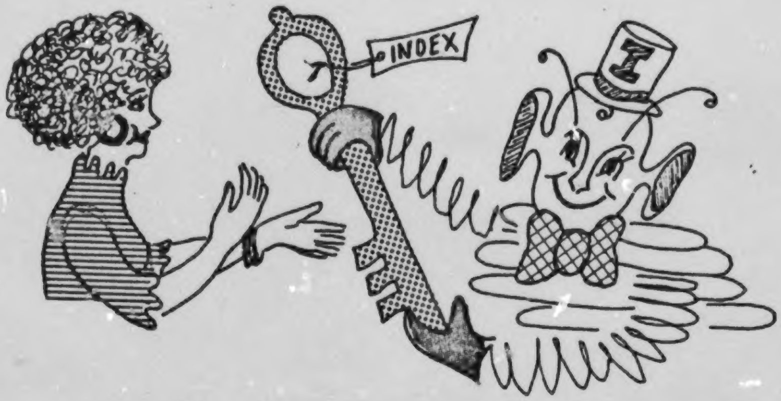
Coping Behaviors - 2 infusion strategies

Decision Making - 2 infusion strategies

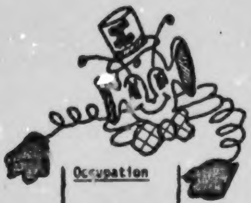
Lifestyle - 1 infusion strategy

Self-Development - 3 infusion strategies

This book is organized so that you can use it in different ways. The INDEX is your key.



Suppose you wanted to teach about an occupation because it was of high interest in your geographic area or of special interest to the children. Choose an infusion strategy by occupational theme.



Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
CB	Going Below	Diver	Why Dive?	Describe, find similarities and differences	___
LS	Coming Attractions	Theater Manager	Alike and Different	Describe, find similarities and differences	___
SD	At Your Service	Deliveryman	Try This One	Categorizations	___

Perhaps you wish to transform a math period into career education. Select your specific math topic and use that activity.

MATHEMATICS

(Facts and Operations)

CB	I Protect You	Policeman	It Has to Be Written	Counting	___
CB	I Protect You	Policeman	Help Me Find It	Cardinal numbers	___
DM	Things Look Different	Pilot	Listen to Ground Control	Cardinals to 100	___

Or maybe you feel your children need work in one of the career development areas. Choose activities from that section and teach them.

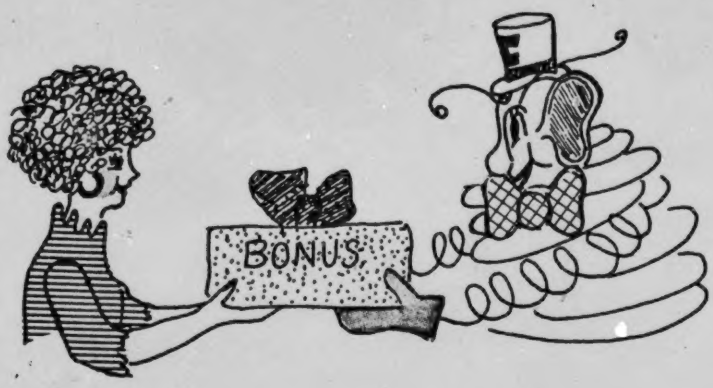
CB	What's the Number?	Telephone Operator	Long Distance Calling	One-step problems	___
DM	Try It This Way	Home Service Representative	More or Less	One-step problems	___
LS	That's Living	Nurseryman	People or Plants	One-step problems	___
LS	That's Living	Nurseryman	Gardens	One-step problems	___
SD	Made to Measure	Upholsterer	Measured to Fit	Solve number stories	___

In this guide you will find teaching materials in the form of teaching units called infusion strategies. Each strategy contains the following:

1. Career development concepts
2. Teacher goals
3. Vocabulary
4. Performance objectives
5. Listings of subject matter concepts used
6. Preplanning suggestions
7. Student activities
8. Student pages (REACT pages)
9. References to related materials
10. Job descriptions of the occupations presented

Within each infusion strategy there are 3-5 teaching activities. Be selective. Choose those that fit you and your students.

REACT Pages



Student materials are offered for each activity in the form of Reinforcement Activity (REACT) pages. The REACT page is an activity supplement to be used at the discretion of the teacher. Directions for using the REACT pages are at the end of each activity.

Maybe it's time to start--

You may now feel that you are ready to start using this guide. If so, you need not read the material below. However, if you need additional preview of guide contents and additional suggestions for getting started,

LET'S TAKE A WALK THROUGH THE GUIDES.

IMAGINE YOU ARE A FIRST GRADE TEACHER who has decided to correlate some social studies concepts and career development concepts. The steps described below will assist you.

IT IS IMPORTANT THAT YOU FOLLOW EACH STEP EXACTLY AND TURN TO EACH PAGE NUMBER GIVEN WHEN YOU ARE INSTRUCTED TO DO SO.

Using the Master Index of Infusion Strategy Content

Step 1 Turn to the master index at the back of this guide. Note the code at the top. Look for the heading titled First Experience Level.

Master Index

Step 2 Under this level, note the titles of each column, then look to the column titled "Subject Matter." Moving down the column, go through all four areas, language arts, mathematics, science, and social studies. Match the concepts which you see here with the subject matter concepts you are now teaching. You may find that there are many concepts listed which you are now using or have used in your classroom.

Column in the Master Index

Step 3 Let's say you have been working with the social studies concept "dependence upon others" and you find several strategies which deal with that concept such as "I Protect You" - Policeman, "Going Below" - Diver, "All the World" - Actor, etc. Further suppose that there has been a current event focusing the attention of the children in your class on the policeman. Therefore, you decide to teach the "I Protect You" infusion strategy which presents the occupation of the policeman. You are now ready to find that strategy so that you can become familiar enough with it to begin your planning. The strategy begins on p. ___ in the Coping Dimension Guide. You can determine in which guide the strategy is located by looking at the "Dimension" column.

Concept to be taught

Using the Introductory Material in an Infusion Strategy, Using the Job Description, and Using the References to Related Materials

A Word About Infusion Strategies--

Infusion strategies are samples of how to infuse career development concepts and subject matter concepts. Occupations serve as the vehicle to accomplish the infusion process. In all cases there is no attempt to steer children into specific occupational emphases. The intention, rather, is to provide a survey of a wide range of occupational areas from which an individual could begin to consider his own potentialities and to capitalize upon the excellent motivation that occupations can provide. Each infusion strategy contains three-five teaching activities.

Infusion Strategy Information

Step 4 Examine the introductory page of the infusion strategy (page ___). Note that the career development dimension is Coping Behaviors. (Perhaps you feel that you need more information about the Coping Behaviors Dimension. If so, turn to the beginning of the Coping Behaviors section (pages ___ through ___) and look over this material for background information.) Be sure to read the subconcept and major concept which are also found on this introductory page. Note that the occupation dealt with is the policeman and the occupational cluster is Public Services. If at this time, you want to know more about what a policeman does, turn to the end of the infusion strategy (page ___) and read the job description, Police Officers.

Infusion strategy introductory page

Job description

Step 5 As you turn to the next page (page ___), you will find Teacher Goals and a listing of the titles of the four activities presented in this infusion strategy. The next page shows the vocabulary list. Simply familiarize yourself with the information on these pages.

Teacher goals

Vocabulary

Step 6 If you were in the process of preparing to teach this infusion strategy, now would be a good time to look over the list of related materials found near the end of the strategy (page ___) so that plans could be made for obtaining them.

Related materials

Using the Activities Which Involve the Children

Step 7 Turn to the first activity in the infusion strategy which is titled "Watch Out" (page ___). Here you find the performance objectives which are for the career development concepts.

Performance objectives

A word about performance objectives--

Care has been taken to provide objectives at different levels of difficulty within cognitive, affective, and psychomotor domains.

Performance objectives information

Step 8 Look at the listing of subject matter concepts used in this activity and the preplanning suggestions for the teacher (page ___).

Subject matter concepts
Preplanning suggestions

Step 9 The next few pages ___ through ___ contain the activities which involve the students. Each page is divided into two columns. In the left column, you find the dimension subconcepts and the names of the dimensions which are being used in these particular activities. (For more information about the three Interacting Dimensions, turn to pages ___ through ___.) The right column gives a description of the activities which involve the children. The pupil performance objectives (PPO) are in italics and are followed by suggestions for infusing the dimension concept with class activities and the child's life.

Student activities

Using The REACT Pages

Step 10 In the right column on page ___ (at the end of the student activities), you find the teacher directions for using the REACT pages. Following the directions you find a code and the REACT page title. The code used to identify the REACT page includes the initials of the career development dimension, experience level, and the number of the REACT page as it appears in sequence. For example:

Teacher directions for REACT pages

CB/Level 1/1
"Safety First"

REACT page code

Coping Behaviors/Level 1/REACT page 1

The same code also appears on the REACT pages (pages ___ and ___).

A word about REACT pages--

The REACT pages are not intended for passive enjoyment. REACT pages ask children to do things that are based on a child's own individual interests and needs.

REACT page information

Examining Other Activities

Step 11 Now turn to page ___. You will find a second activity titled "It Had To Be Written." This activity is the second of four activities written for this infusion strategy. You may examine this activity and the two following it in the same manner as you examined the first (Steps 8 through 11).

Other activities

Using Other Strategies

Step 12 Having looked at all four activities in the infusion strategy, you have completed your examination of an entire strategy. Once you understand the steps involved in using one strategy, you will find it easy to use any of the others.

Examination completed

It's time to start--

The infusion strategies are by no means an exhaustive list of the ways that career education concepts can be infused with all subject matter concepts. Sample infusion strategies have been prepared to show how career concepts can be integrated with concepts in mathematics, language arts, social studies, and science. However, *the door is open for you to devise additional infusion strategies* for subject matter concepts that are not included in the sample strategies. You'll understand how to develop some infusion strategies once you have tried several of the samples.

The community is at your doorstep. *Use it!*

Parents are available to assist. *Invite them in!*

Hands-on materials can be obtained. *Get them or make them!*

Infusion strategies remain to be devised. *Create some!*

MASTER INDEX OF INFUSION STRATEGY CONTENTS

CB - COPING BEHAVIORS
LS - LIFESTYLE
DM - DECISION MAKING
SD - SELF-DEVELOPMENT

Fifth Experience Level

LANGUAGE ARTS

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Grammar and Usage)					
CB	Reckoning and Relocating	Accountant	Greener Grass?	Labeling and Classifying	78
DM	How the Ads Add Up	Advertising Copywriter	Analysis of Advertisements	Classifying	118
LS	Building with Style	Carpenter	Construction Project	Labeling and Classifying	153
(Listening and Speaking)					
CB	Universal Melodies	Musician	Fixing Faults	Playing roles with dialogue Stress and feeling in speech Discussion skills	41
CB	Universal Melodies	Musician	World of Music	Interviewing	51
CB	Reckoning and Relocating	Accountant	Keeping Track	Giving and taking directions Noting and remembering details	68
CB	Reckoning and Relocating	Accountant	Here's a Switch	Discussion skills Role playing Interviewing	73
CB	Reckoning and Relocating	Accountant	Greener Grass?	Interviewing	78
DM	How the Ads Add Up	Advertising Copywriter	Analysis of Advertisements	Discussion	118
DM	How the Ads Add Up	Advertising Copywriter	Advertiser and Client	Role play with dialogue	125
DM	How the Ads Add Up	Advertising Copywriter	Cigarette Perspectives	Discussion	134
DM	How the Ads Add Up	Advertising Copywriter	Attracting New Employees	Role play with dialogue	137
LS	Building with Style	Carpenter	Construction Project	Giving and taking directions	153
LS	Building with Style	Carpenter	Carpenter Roles	Playing roles with dialogue Interviewing Listen for comprehension	164
SD	Growing Pains and Pleasures	Pediatrician	Parent Panel	Discussion skills	187
SD	Changing Places	Travel Agent	Cook's Tours	Playing roles Formal and informal language Giving and taking directions Stress and feeling in speech	203
SD	Aptly Announcing	TV Announcer	Trippingly on the Tongue	Formal and informal language Control pitch, volume, tone Stress and feeling Avoiding excessive extra sounds	218
SD	Aptly Announcing	TV Announcer	Action! Camera!	Role playing Formal and informal language Control of speech Stress and feeling	231
(Reading)					
CB	Universal Melodies	Musician	World of Music	Finding information	51
DM	Links with the Soil	Soil Conservationist	How's and Why's	Making inferences Appreciating moods of characters	97
DM	How the Ads Add Up	Advertising Copywriter	Analysis of Advertising	For information Making inferences	118
DM	How the Ads Add Up	Advertising Copywriter	Cigarette Perspectives	Making inferences	134
LS	Building with Style	Carpenter	Living a Style	Making inferences Generalizations Visual imagination	148
LS	Building with Style	Carpenter	Then and Now	Making inferences Finding information	158
LS	Building with Style	Carpenter	Carpenter Roles	Note-taking	164
(Writing Skills)					
DM	Links with the Soil	Soil Conservationist	How's and Why's	Putting ideas in order Characterization and plot	97
DM	How the Ads Add Up	Advertising Copywriter	Advertiser and Client	Advertisements	125
DM	How the Ads Add Up	Advertising Copywriter	Cigarette Perspectives	Changing points of view	134
DM	How the Ads Add Up	Advertising Copywriter	Attracting New Employees	Advertisements	137

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Writing Skills Cont'd)					
LS	Building with Style	Carpenter	Living a Style	Descriptions	148
LS	Building with Style	Carpenter	Then and Now	Completing open-ended stories Changing points of view	158
LS	Building with Style	Carpenter	Carpenter Roles	Points of view Writing descriptions	164
SD	Aptly Announcing	TV Announcer	Action! Camera!	Changing points of view Characterization and plot Writing quotations	231

Fifth Experience Level

MATHEMATICS

(Facts and Operations)					
CB	Universal Melodies	Musician	Musical Math	Changing terms of a fraction	46
(Figural)					
CB	Reckoning and Relocating	Accountant	Keeping Track	Graphs	68
CB	Reckoning and Relocating	Accountant	Greener Grass?	Tables and graphs	78
LS	Building with Style	Carpenter	Living a Style	Scale drawing	148
SD	Growing Pains and Pleasures	Pediatrician	Are You a Square?	Tables and graphs	180
(Geometry)					
LS	Building with Style	Carpenter	Construction Project	Angles, perpendiculars	153
(Measurement)					
LS	Building with Style	Carpenter	Living a Style	Area Precision in measuring	148
LS	Building with Style	Carpenter	Construction Project	Length and area	153
SD	Growing Pains and Pleasures	Pediatrician	Are You a Square?	Precision to nearest unit Fractional parts of units	180
SD	Changing Places	Travel Agent	Pathfinding Practice	Length Time Rate of speed	207
(Problem Solving)					
CB	Universal Melodies	Musician	Musical Math	Use of fractional numbers	46
CB	Reckoning and Relocating	Accountant	Cash Accounting	Earning, saving, spending money Keeping accounts Buying and selling	62
CB	Reckoning and Relocating	Accountant	Keeping Track	Keeping accounts	68
SD	Changing Places	Travel Agent	Pathfinding Practice	Multiple-step problems Comparisons Money concepts	207

Fifth Experience Level

SCIENCE

(Biology)					
DM	Links with the Soil	Soil Conservationist	Little Drops of Water	Control of environment of living things	88
DM	Links with the Soil	Soil Conservationist	The Lay of the Land	Control of environment of living things	94
SD	Growing Pains and Pleasures	Pediatrician	Children's Health	Human body functions Systems and organs of the body	174
SD	Growing Pains and Pleasures	Pediatrician	Are You a Square?	Living things change as they grow.	180
SD	Growing Pains and Pleasures	Pediatrician	Parent Panel	Living things change as they grow.	187
(Earth and Sky)					
DM	Links with the Soil	Soil Conservationist	Little Drops of Water	Soil can be conserved. Erosion and depletion of soil	88

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Earth and Sky Cont'd)					
DM	Links with the Soil	Soil Conservationist	The Lay of the Land	Soil can be conserved. Erosion and depletion of soil	94
DM	Links with the Soil	Soil Conservationist	How's and Why's	Soil can be conserved. Erosion and depletion of soil	97
(Scientific Method)					
DM	Links with the Soil	Soil Conservationist	A Special Tool	Investigative techniques Special instruments Categorization	101
SD	Growing Pains and Pleasures	Pediatrician	Children's Health	Comparisons made by measurements Special instruments help us observe. Use of senses to gather data	174
SD	Growing Pains and Pleasures	Pediatrician	Parent Panel	Similarities and differences	187

Fifth Experience Level

SOCIAL STUDIES

(Economics)					
CB	Reckoning and Relocating	Accountant	Here's a Switch	Moving for economic motives Supply and demand	73
CB	Reckoning and Relocating	Accountant	Greener Grass?	Supply and demand Division of labor Community workers	78
DM	Links with the Soil	Soil Conservationist	Other Conservationists	Different uses of environment Technology produces changes. Interdependence of geographical regions	108
DM	How the Ads Add Up	Advertising Copywriter	Original Product	Supply and demand Using natural resources	130
DM	How the Ads Add Up	Advertising Copywriter	Cigarette Perspectives	Government regulations	134
LS	Building with Style	Carpenter	Living a Style	Division of labor Supply and demand Goods and services	148
SD	Changing Places	Travel Agent	Whither Thou Goest	Interdependence of regions Using natural resources Different uses of environments	198
SD	Aptly Announcing	TV Announcer	Guys Behind the Guys Behind the Mike	Role differentiations Interdependence	224
(Geography)					
LS	Building with Style	Carpenter	Then and Now	Latin America Needs differ with climate and resources.	158
SD	Changing Places	Travel Agent	Whither Thou Goest	Global locations Climate and topography Interaction between people and environments	198
SD	Changing Places	Travel Agent	Pathfinding Practice	Routes on maps Scale of miles	207
(History)					
CB	Universal Melodies	Musician	Makers of Music	Human life is continuous and interrelated.	34
CB	Reckoning and Relocating	Accountant	Keeping Track	Changes in ways of living result in changed expectations. Modern life has roots in the past.	68
DM	Links with the Soil	Soil Conservationist	The Lay of the Land	Acts and events have consequences	94
LS	Building with Style	Carpenter	Then and Now	Relation of geography and history U. S. History Societies have changed. American values	158
SD	Growing Pains and Pleasures	Pediatrician	Parent Panel	Personal memories Present, past, future	187
(Political Science)					
CB	Reckoning and Relocating	Accountant	Keeping Track	Rules for interaction Effects of common goals	68
SD	Changing Places	Travel Agent	Cook's Tours	Building rules Rules for interaction	203

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Sociology-Anthropology)					
CB	Universal Melodies	Musician	Makers of Music	Cultural diversity Community reflects values. Individuality	34
CB	Universal Melodies	Musician	World of Music	Cultural diversity Community reflects assumptions and values Different means to similar ends	51
CB	Reckoning and Relocating	Accountant	Here's a Switch	Individual characteristics Values and purposes	73
CB	Reckoning and Relocating	Accountant	Greener Grass?	Values and purposes	78
DM	Links with the Soil	Soil Conservationist	Other Conservationists	Individual characteristics Values and purposes in behavior	108
DM	How the Ads Add Up	Advertising Copywriter	Original Product	Community's wants and needs Technology produces changes. Neighborhoods have character.	130
DM	How the Ads Add Up	Advertising Copywriter	Cigarette Perspectives	Values and purposes in behavior Common wants and needs	1[illegible]
LS	Building with Style	Carpenter	Then and Now	Housing Similar basic needs Inherited cultures influence present. Community reflects values.	158
SD	Growing Pains and Pleasures	Pediatrician	Children's Health	Individual characteristics Dependence upon others	174
SD	Growing Pains and Pleasures	Pediatrician	Are You a Square?	Individual characteristics	180
SD	Growing Pains and Pleasures	Pediatrician	Parent Panel	Cultural diversity Similar basic needs Different means to similar ends	187
SD	Changing Places	Travel Agent	Whither Thou Goest	Lifestyles differ with time and place. Technology produces changes in ways of living.	198
SD	Changing Places	Travel Agent	Pathfinding Practice	Individual characteristics Changing conditions and changing values.	207
SD	Aptly Announcing	TV Announcer	Trippingly on the Tongue	Individuality and responsibility Group interactions	218
SD	Aptly Announcing	TV Announcer	Guys Behind the Guys Behind the Mike	Technology changes ways of living. Group interactions	224

UNIVERSAL MELODIES

FIFTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS:	There is a universality of feelings and aspirations of all people--regardless of physical appearance, nationality, creed, sex, or ethnic background.
OCCUPATIONAL FOCUS:	Musician

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Makers of Music
2. Fixing Faults
3. Musical Math
4. The World of Music

Teacher Goals

Teacher goals of this strategy combine a Coping Behaviors Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Musician. In this perspective the teacher's goals are to:

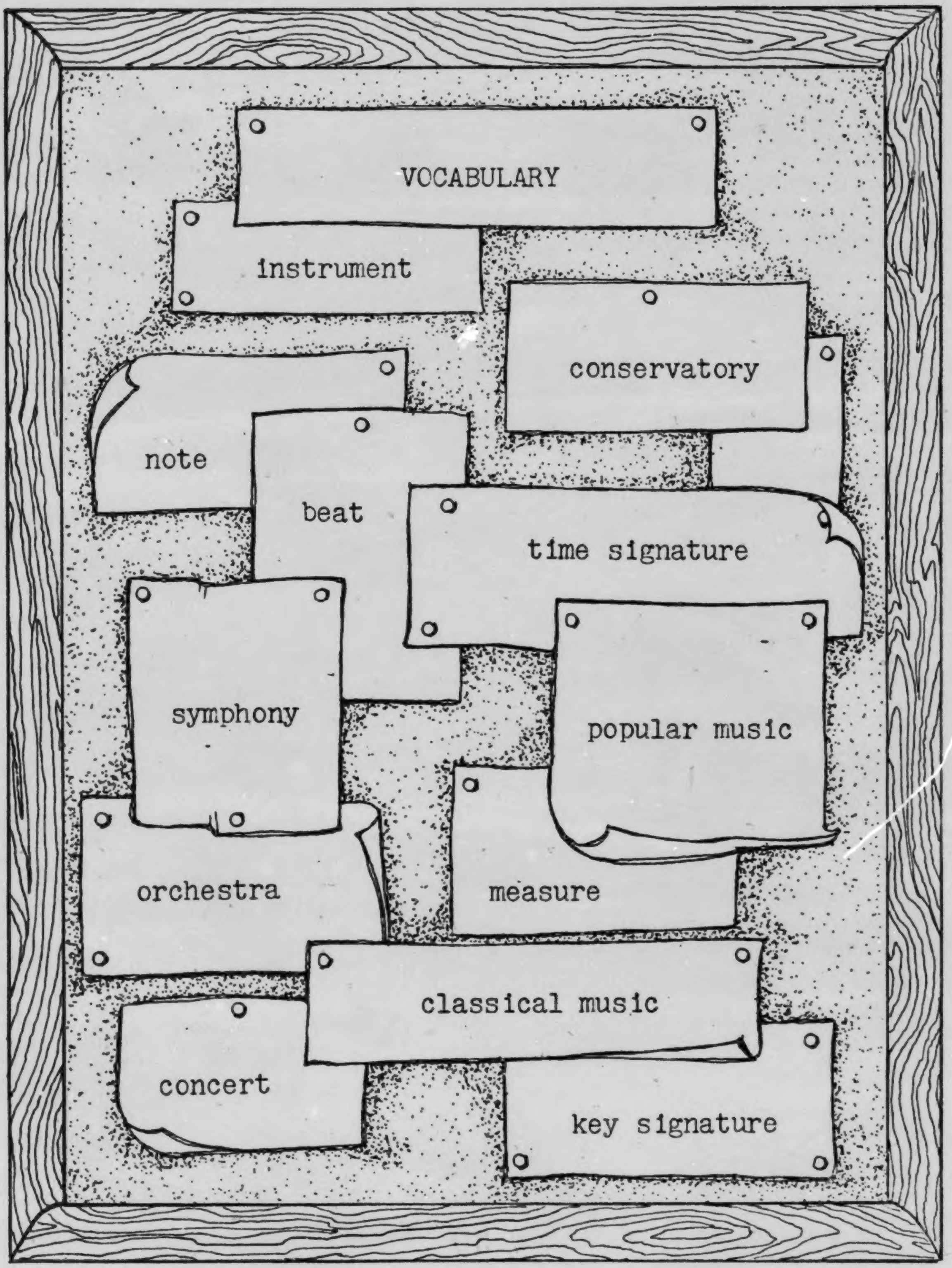
Structure experiences to enable pupils to cooperate with each other to overcome difficulties.

Encourage appreciation of music as a substantial component of a culture or subculture.

Enlarge pupils' awareness of different types and uses of music.

Provide opportunities for pupils to interview persons working as musicians.

Offer practice in applying academic skills to musical content.


VOCABULARY
instrument
conservatory
note
beat
time signature
symphony
popular music
orchestra
measure
classical music
concert
key signature

MAKERS OF MUSIC

Fifth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *identify a composer and his music as components of the culture of a specific historical period.*

Attitudes and Appreciations Dimension

. . . *relate particular musical compositions to people's wants or needs.*

Career Information Dimension

. . . *use musical terms properly in conversation and writing.*

Educational Awareness Dimension

. . . *identify skills and facts needed by a musical composer.*

Subject Matter Concepts

- Social Studies
  - History
    - Human life is continuous and interrelated.
  - Sociology-Anthropology
    - Cultural diversity
    - Community reflects values.
    - Individuality

Preplanning Suggestions

Audio-visual materials of composers' lives and works
Records, tapes and equipment for using the materials

MAKERS OF MUSIC

This activity combines an introduction to some types of classical music and an individualized study into the lives of famous composers. Teacher preparation should include a reasonable familiarity with whatever audio-visual materials may be on hand in the area of composers' lives and works. Relevant filmstrips, sound filmstrips, and phonograph records on the commercial market cover a wide range of possibilities. In case no such aids are immediately available, or for supplementary use, a list of recordings is offered at the end of this activity's description.

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

. . . *relate particular musical compositions to people's wants or needs.* PPO

Help children to identify three general types of music according to uses:

1. "Pure" music that exists for its own sake.
2. Music that tells a particular story.
3. Nationalistic music that rouses feelings of identity or purpose.

Discuss each of these types of compositions, with examples played on the phonograph, and encourage pupils to suggest further examples. However, keep in mind that the present use of the actual music is to provide context for the study of composers' lives. In case of a need to conserve time, get on with the composers.

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

. . . *identify skills and facts needed by a musical composer.* PPO

Occupations have their own vocabularies.

Career Information

There is a universality of feelings and aspirations of all people--regardless of physical appearance, nationality, creed, sex, or ethnic background.

Coping Behaviors

. . . *use musical terms properly in conversation and writing.* PPO

Guide children to realize the universality of music in different cultures and in different eras. The ideas of tastes and preferences may be raised as justifications for both tolerance and enlargement of personal appreciations.

Stress skills, feelings, and talents that contribute to composers' work.

. . . *identify a composer and his music as components of the culture of a specific historical period.* PPO

As information regarding particular composers and their work is accumulating, allow each pupil to choose one for research and reporting. The following names may help as suggestions:

Franz Josef Haydn
Wolfgang Mozart
Johann S. Bach
Ludwig Beethoven
Franz Schubert
Franz Liszt
Frederic Chopin
Peter Tchaikovsky
Johannes Brahms
Jean Sibelius

and, in a lighter vein:

Aaron Copland
Irving Berlin
Ferde Grofe

The children could be invited to make further suggestions from their own musical awareness.

Eventual reports, particularly oral ones, can be enhanced with a short recording of the subject's work.

The REACT page calls for pupil exchanges of personal records as a means of comparing tastes and possibly gaining new sources of enjoyment. Stress the normality of differences in musical tastes as analogous to other kinds of individual differences. Discuss how it feels to deliberately listen to something that "you know you don't like." What does familiarity have to do with liking and not liking?

A possible variation to this approach is to have children to choose to listen to a composition with which they are not familiar.

CB/Level 5/1

"Try It, You Might Like It"

SUGGESTED COMPOSITIONS

"Pure" Music

Haydn	Symphony #94 (especially the second movement)
Mozart	Eine Kleine Nachtmusik
Beethoven	Symphony #5 (especially the first movement)
Chopin	Etude in E Major, Opus 10, Number 3
Liszt	Hungarian Rhapsody #2
Tchaikovsky	Piano Concerto #1 (especially the first movement)
J. S. Bach	Toccata and Fugue in D Minor

Music That Tells a Story

Rossini	William Tell Overture
Saint-Saens	Danse Macabre
Moussorgsky	A Night on Bare Mountain
Tchaikovsky	Nutcracker Suite
Grofe	Grand Canyon Suite
Schubert	"Trout" Quintet (fourth movement)
Prokofiev	Peter and the Wolf
Dukas	The Sorcerer's Apprentice

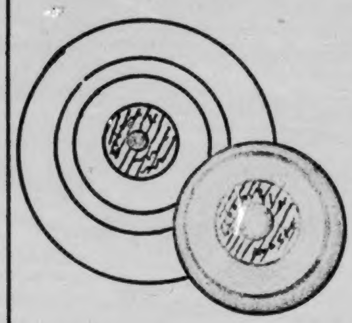
Nationalistic Music

United States	The Star-Spangled Banner Columbia, the Gem of the Ocean
France	The Marseillaise
Finland	Finlandia
Israel	Hatikva
Canada	The Maple Leaf Forever
Russia	Meadowlands

(THESE LISTS ARE BARELY SUGGESTIVE OF THE WIDE RANGE OF POSSIBILITIES FOR EXAMPLES OF THE THREE TYPES OF MUSIC IDENTIFIED.)

TRY IT, YOU MIGHT LIKE IT

Choose a classmate who enjoys a kind of music that you are unfamiliar with or that you don't think you like. Exchange one of your favorite records with that person and use the form below to help you express your thoughts as you listen. (Give the music at least two courteous listenings.)



TITLE OF COMPOSITION ______________________

COMPOSER ______________________

PERFORMER(S) ______________________

____

HOW IT MADE ME FEEL

____

____

____

____

THINGS IT MADE ME THINK ABOUT

____

____

____

Make a similar exchange with a different classmate--or listen to something together that is unfamiliar to both of you.

Another form is on the other side of this sheet for your second experiment.

TITLE OF COMPOSITION ______________________________

COMPOSER ______________________________

PERFORMER(S) ______________________________

____

HOW IT MADE ME FEEL

____

____

____

____

THINGS IT MADE ME THINK ABOUT

____

____

____

____

FIXING FAULTS

Fifth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *take part in a dramatization dealing with means of coping with difficulties in musical performance.*

. . . *discuss the causes and effects of faultiness when performing musically.*

Attitudes and Appreciations Dimension

. . . *discuss common expectations regarding a performance before an audience.*

Career Information Dimension

. . . *point out features of performing before an audience that may or may not be attractive.*

Educational Awareness Dimension

. . . *identify artistic skills needed by a musical performer.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Playing roles with dialogue
    - Stress and feeling in speech
    - Discussion skills

Preplanning Suggestions

Individual or group musical performances of students or others on a volunteer basis

FIXING FAULTS

Prepare children for a series of skits by discussing what takes place during a musical performance. What is the purpose of the performance? What people are usually involved? What must they be able to do? The skits should illustrate flaws in performing and how performers and audiences might deal with such difficulties.

. . . *take part in a dramatization dealing with means of coping with difficulties in musical performance.* PPO

. . . *discuss the causes and effects of faultiness when performing musically.* PPO

The purpose of these skits is to provide practice in dealing with mistakes, ignorance, or lack of certain skills. As children are grouped to work on particular possibilities, guide their thinking toward how people behave when something "goes wrong." How do I feel when I make a mistake? How do I feel when someone else does? How do other people differ in the ways they treat their own shortcomings and the shortcomings of others? Seek some awareness of the purposes of such behavior--why do some try to help, others to ridicule, and still others to "not notice?"

. . . *identify artistic skills needed by a musical performer.* PPO

. . . *discuss common expectations regarding a performance before an audience.* PPO

There is a universality of feelings and aspirations of all people--regardless of physical appearance, nationality, creed, sex, or ethnic background.

Coping Behaviors

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Most occupations include common expectations, such as punctuality, dependability, and avoidance of excessive absence.

Attitudes and Appreciations

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

. . . point out features of performing before an audience that may or may not be attractive.
PPO

Pupils who are taking music lessons may be the logical choices to "star" as the performers, but this should not count out children who would like to try or who could handle an equally illustrative non-musical performance.

Help pupils to distinguish different causes for faultiness in performance--ignorance of what must be done, lack of skill in doing what must be done, or a mistake of some kind. Naturally, these ideas may be applied to almost any area of endeavor.

The follow-up, then, is to consider how those who are at "fault" may behave, and how witnesses to the shortcomings may behave. In both cases, a range of either positive or negative behavior is possible--constructive to destructive criticism from an audience, acceptance to covering up by a performer.

The REACT page provides some instructions for practicing performing before a group. Encourage the idea of giving reports, performing, or other activities of presentation, as opportunities to learn the skills of such presentation. Reading aloud the lyrics of songs can tie the activity more directly to musical feelings.

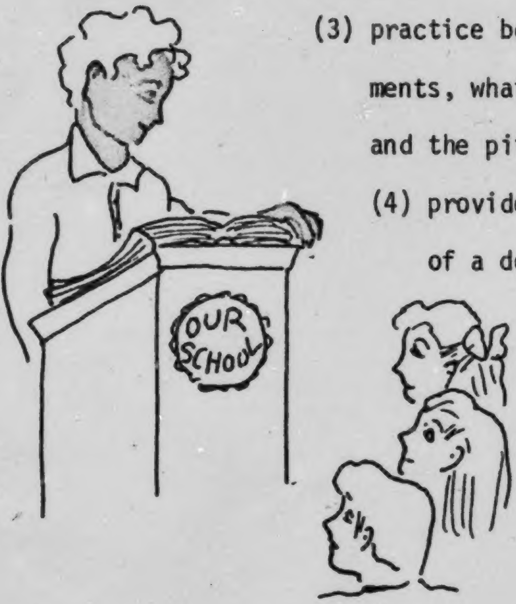
CB/Level 5/2

"Practice Patterns"

PRACTICE PATTERNS

Being a musician usually means performing for an audience. Most of us feel nervous when we are in front of a group or even just thinking about it. One way to help ourselves reduce that nervousness is to practice certain kinds of self control. Whether we will speak, act, sing, read aloud, or play an instrument, we can:

(1) be sure we know the material we are using;
(2) plan carefully how our time will be used;
(3) practice body controls, such as eye movements, what we do with our hands and feet, and the pitch and volume of our voice; and
(4) provide ourselves with the advantages of a definite beginning and ending.



Practice can be made a little easier if we use some "helpers."

On the other side of this paper, the first verse of "America" is shown with some signals as a way to remind yourself of things to do while reading it aloud.

↑ My country, 'tis of thee, ×
Sweet land of liberty, × ☺
Of thee I sing. ×
← Land where my fathers died,
→ Land of the Pilgrims pride,
↑ From every mountainside,
Let ☺ freedom ring!

←	Look at audience, toward the left
→	Look at audience, toward the right
↑	Look at audience, straight ahead
☺	Smile!
×	PAUSE

Choose a song or poem that you especially like and copy the words neatly on a piece of paper. Read them aloud carefully to yourself and put in some signals where you feel they would help.

Practice reading to a classmate, or a small group of friends, until you feel ready to read for the whole class.

MUSICAL MATH

Fifth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *cooperate with a classmate in a recreational approach to musical notation.*

Career Information Dimension

. . . *distinguish differing attitudes among classmates regarding work in musical notation.*

Educational Awareness Dimension

. . . *describe how one's attitude toward musical notation affects one's efforts.*

. . . *relate one's own present musical knowledge to the requirements of being a musician.*

Subject Matter Concepts

- Mathematics
  - Problem Solving
    - Use of fractional numbers
  - Facts and Operations
    - Changing terms of a fraction

Preplanning Suggestions

Music books
Music paper for notations

MUSICAL MATH

There is a universality of feelings and aspirations of all people--regardless of physical appearance, nationality, creed, sex, or ethnic background.

Coping Behaviors

Learning achievement depends upon effort and ability.

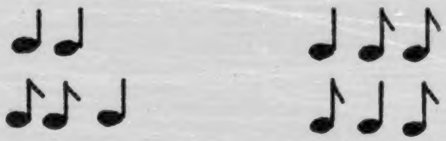
Educational Awareness

Review with pupils the mathematical patterns of musical notation that involve the number of beats in a measure and the relative time values of notes. The music teacher may have suggestions for methods of presentation. The regular music book may be used for examples. Encourage practice on paper and the chalkboard.

. . . *cooperate with a classmate in a recreational approach to musical notation.* PPO

. . . *describe how one's attitude toward musical notation affects one's efforts.* PPO

Maintain a spirit of exploration in seeking (for example) how many combinations of quarter notes and eighth notes could be invented to fit a two-beat measure with a quarter note getting a full beat.



How many combinations of quarter and eighth notes are in a three-beat measure? How many are in a four-beat measure? Most likely the use of eighth, quarter, half, and whole notes, plus variations of beats per measure and which note gets a full beat, will provide a sufficient supply of practice opportunities. Rests might also be included for those whose interest and skill allows further complications.

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

. . . *distinguish differing attitudes among classmates regarding work in musical notation.* PPO

. . . *relate one's own present musical knowledge to the requirements of being a musician.* PPO

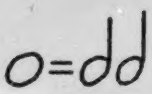
Children's attitudes toward musical notation may normally range from extreme negativism, through casual acceptance, to a few cases of real enjoyment. Invite the pupils whose musical skills are more advanced to describe their experiences in needing to understand reading and writing music. Meanwhile, use this context also to elicit personal opinions about the pros and cons of musicianship as a career.

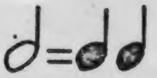
The REACT page provides further practice with musical notation of time. Be sure that the ideas of beat, measure, and different types of notes are understood.

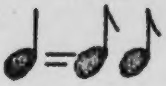
CB/Level 5/3

"The Beats Go On"

THE BEATS GO ON

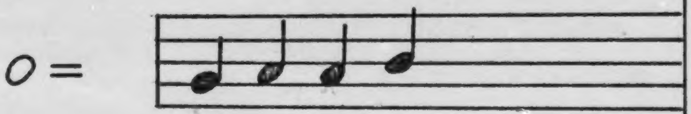

A whole note gets twice as many beats as a half note.


A half note gets twice as many beats as a quarter note.

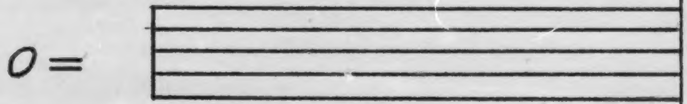

A quarter note gets twice as many beats as an eighth note.

Follow the directions below to show equal totals of beats. Use any combination of lines and spaces that you like. The first example is done for you.

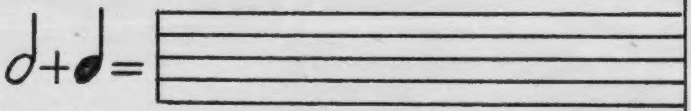
Show how many quarter notes are equal to one whole note.



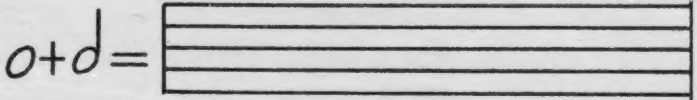
Show how many eighth notes are equal to one whole note.



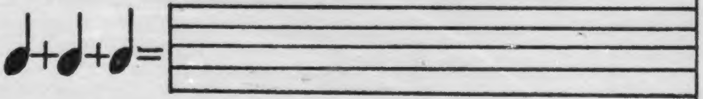
Show how many eighth notes are equal to one half note and one quarter note.



Show how many quarter notes are equal to one whole note and one half note.



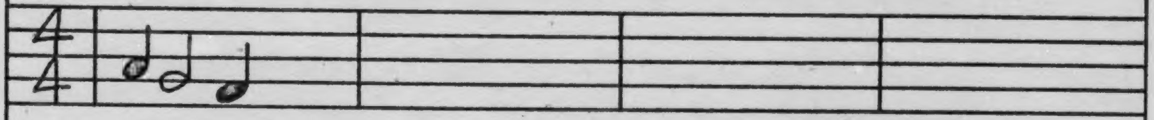
Show how many eighth notes are equal to three quarter notes.



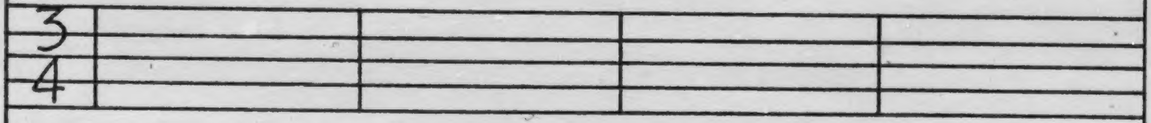
On the other side of this paper are exercises with more possible patterns of timing.

If a quarter note gets one full beat, use only half notes and quarter notes to make up at least four different arrangements for a four-beat measure.

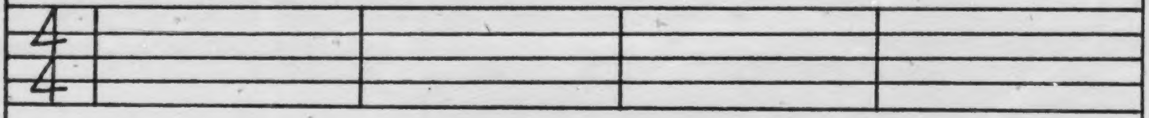
One possibility is done for a starter.



If a quarter note gets one full beat, use only quarter notes and eighth notes to make up at least four different arrangements for a three-beat measure.



If a quarter note gets one full beat, use only half notes, quarter notes, and eighth notes to make up at least eight different arrangements for a four-beat measure.



THE WORLD OF MUSIC

Fifth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *describe the purposes and means that have affected the use of music by a particular culture or subculture.*

Career Information Dimension

. . . *list materials and equipment used by musicians in their work.*

. . . *use musical terms properly in conversation.*

. . . *point out problems and rewards that may be experienced by a musician.*

Educational Awareness Dimension

. . . *identify a specified number of musical facts that one has learned outside of school.*

Subject Matter Concepts

- Social Studies
  - Sociology-Anthropology
    - Cultural diversity
    - Community reflects assumptions and values.
    - Different means to similar ends
- Language Arts
  - Listening and Speaking
    - Interviewing
  - Reading
    - Finding information

Preplanning Suggestions

Materials to make a vocabulary list and other lists pertinent to the activity
Musician to interview

THE WORLD OF MUSIC

Career-oriented learning may take place in school or out of school.

Educational Awareness

Occupations require the use of specific materials and equipment.

Career Information

Occupations have their own vocabularies.

Career Information

There is a universality of feelings and aspirations of all people--regardless of physical appearance, nationality, creed, sex, or ethnic background.

Coping Behaviors

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

Use the vocabulary list as a beginning for brainstorming about the world of musical performance. Draw out whatever the children already know about music in general, writing their contributions on the chalkboard as they are offered.

. . . *identify a specified number of musical facts that one has learned outside of school.* PPO

. . . *list materials and equipment used by musicians in their work.* PPO

. . . *use musical terms properly in conversation and writing.* PPO

As the suggestions accumulate, guide the collection into some pattern of organization of larger topics, such as:

the development of modern instruments

types of compositions

families of instruments

musical notation

uses of music

kinds of performing groups

. . . *describe the purposes and means that have affected the use of music by a particular culture or subculture.* PPO

. . . *point out problems and rewards that may be experienced by a musician.* PPO

Gauge pupil interest in determining how a study of one or more of these larger topics will be implemented. The situation may call for the entire class to work together, smaller interest groups, or individual study. In any case, emphasize various musical experiences as examples of diverse means to satisfy a particular human characteristic.

Provide audio-visual aids, printed materials, community resources, pupil and teacher talents as available and appropriate.

The REACT page invites the pupil to prepare and carry out an interview with a musician. Offer a good bit of direction for this activity as the feelings and attitudes of actual performers are extremely important in providing insights into musicianship. The subject for the interview may be an adult who is actually a performing musician, or a pupil in school who is involved in some form of music lessons and performing.

Use results of the interviews as bases for discussing the possible pros and cons of musicianship.

CB/Level 5/4

"How's Business?"

HOW'S BUSINESS

To find out more about what a musician feels and does, prepare to interview either an adult musician who actually performs or someone in school who is taking lessons on an instrument.

Use the questions below as part of your interview.

WHAT INSTRUMENT DO YOU PLAY?
HOW MUCH DO YOU PRACTICE EACH WEEK?
HOW DO YOU FEEL WHEN YOU ARE GETTING READY TO PERFORM FOR AN AUDIENCE?
HOW DO YOU FEEL WHILE YOU ARE PERFORMING FOR AN AUDIENCE?
DO YOU WORK FULL-TIME AS A MUSICIAN? IF SO, WHERE AND WHAT IS YOUR JOB? IF NOT, HOW DOES YOUR WORK WITH MUSIC GO ALONG WITH YOUR MAIN WORK?
WHAT DO YOU LIKE BEST ABOUT BEING A MUSICIAN?
WHAT DO YOU DISLIKE MOST ABOUT BEING A MUSICIAN?

RELATED MATERIALS

Alphabet of Music, The (Book) Robert W. Surplus. Lerner Publications Company, Minneapolis, Minnesota, 1963.

Biographies of Great Composers (12 Sound Filmstrips) Bowmar, 622 Rodier Drive, Glendale, California 91201, 1972.

Career Opportunities I (Filmstrips) Popular Science Audio-Visuals, 5235 Ravenswood Avenue, Chicago, Illinois 60640, 1970.

Composers of Many Lands and Many Times (Filmstrips) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Copeland: Open Prairie from Billy the Kid (Film, Color, 6-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

Discovering Mood in Music (Film, Color, 15½-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

Discovering the Sound and Movement in Music (Film, Color, 16-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

I Want to Be a Musician (Book) F. Eckart. Childrens Press, Inc., 1224 West Van Buren Street, Chicago, Illinois 60607, 1962.

Learning from Disappointments (Film, Color, 11-min.) Coronet Instructional Films, Coronet Building, 65 East South Water Street, Chicago, Illinois 60601, 1961.

Men of Music (Filmstrips) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Values Series (7 Films, Color, 11-min.) Bailey Film Associates, 11559 Santa Monica Boulevard, Los Angeles, California 90025, 1972.

MUSICIAN

Musicians who specialize in popular music usually play the trumpet, trombone, clarinet, saxophone, or a rhythm instrument. Dance bands play in nightclubs, restaurants, and at special parties. Some bands, jazz groups, and solo performers may give concerts and perform on television.

Classical music specialists play in opera and theater orchestras, symphony orchestras, and for other performances requiring orchestral accompaniments. The instruments played by most of these musicians are the strings, brass and woodwinds. Some form small groups to give concerts of chamber music.

Many pianists accompany vocal or instrumental soloists or choral groups or provide background music in restaurants or other places. Most organists play in churches, often directing the choir. A very few exceptional musicians become concert artists. Both classical and popular musicians often make recordings either individually or as a group.

A high proportion of all musicians teach in schools and colleges and are seldom, if ever, paid for performing. These teachers may be on the faculties of music schools or conservatories or of colleges which offer such instruction. Some teach in public schools where they direct vocal and instrumental music programs, teach general classroom music appreciation, and give instrumental instruction.

Most professional musicians work in large cities where the nation's entertainment activities are concentrated. Music teachers are employed all over the country, either in schools or privately. Many qualified instrumentalists have other full-time jobs and only occasionally work as musicians.

To achieve a career as a performer or as a music teacher, young people need intensive training. They need to acquire not only great technical skill but also a thorough knowledge of music. Before a young person can qualify for advanced study, an audition is frequently necessary.

Over 550 conservatories of music and college and university schools of music offer 4-year programs leading to a bachelor's degree in music education. The degree of bachelor of music is frequently awarded to students who major in instrumental or vocal music. Advanced degrees usually are required for college teaching positions, but exceptions may be made for well-qualified artists.

Musicians who play jazz and other popular music must have an understanding of and feeling for that style of music, but skill and training in classical styles may expand employment opportunities. Some groups of young people form their own dance bands, and may later have opportunities to audition for other local or better known bands and orchestras.

The field of music performance is expected to remain overcrowded through the 1970's. Competition is usually keen for positions which afford some stability of employment--for example, jobs with major orchestras and teaching positions in conservatories and colleges and universities. Although many opportunities for single and short-term engagements playing popular music in night clubs, theaters, and other places can be expected, the supply of qualified musicians seeking such jobs is likely to remain greater than the demand. On the other hand, there is likely to remain a shortage of highly qualified church organists, experienced accompanists, and well-trained players of stringed instruments. Public school systems will probably continue to need more fully qualified music teachers and supervisors.

The amount of money received for a performance by either classical or popular musicians depends to a large extent on their professional reputations. The salaries of public school music teachers are determined by the salary schedule adopted for all teachers. However, they frequently supplement their earnings by giving private lessons or taking church positions.

Musicians who are performers usually work at night and on weekends. They must also spend time in daily practice and rehearsals. Performers may have relatively long periods of unemployment between jobs, and the overall level of their earnings generally is lower than that of many other occupations. They do not usually work steadily for one employer, and may not qualify for fringe-type benefits common to other occupations. Most musicians who play professionally belong to the American Federation of Musicians (AFL-CIO). Concert soloists also belong to the American Guild of Musical Artists, Inc. (AFL-CIO).

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 166-168.

RECKONING AND RELOCATING

FIFTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS: It is important for a person to be able to make the transition from one job to another.

OCCUPATIONAL FOCUS: Accountant

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Cash Accounting
2. Keeping Track
3. Here's a Switch
4. Greener Grass?

Teacher Goals

Teacher goals of this strategy combine a Coping Behaviors Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Accountant. In this perspective the teacher's goals are to:

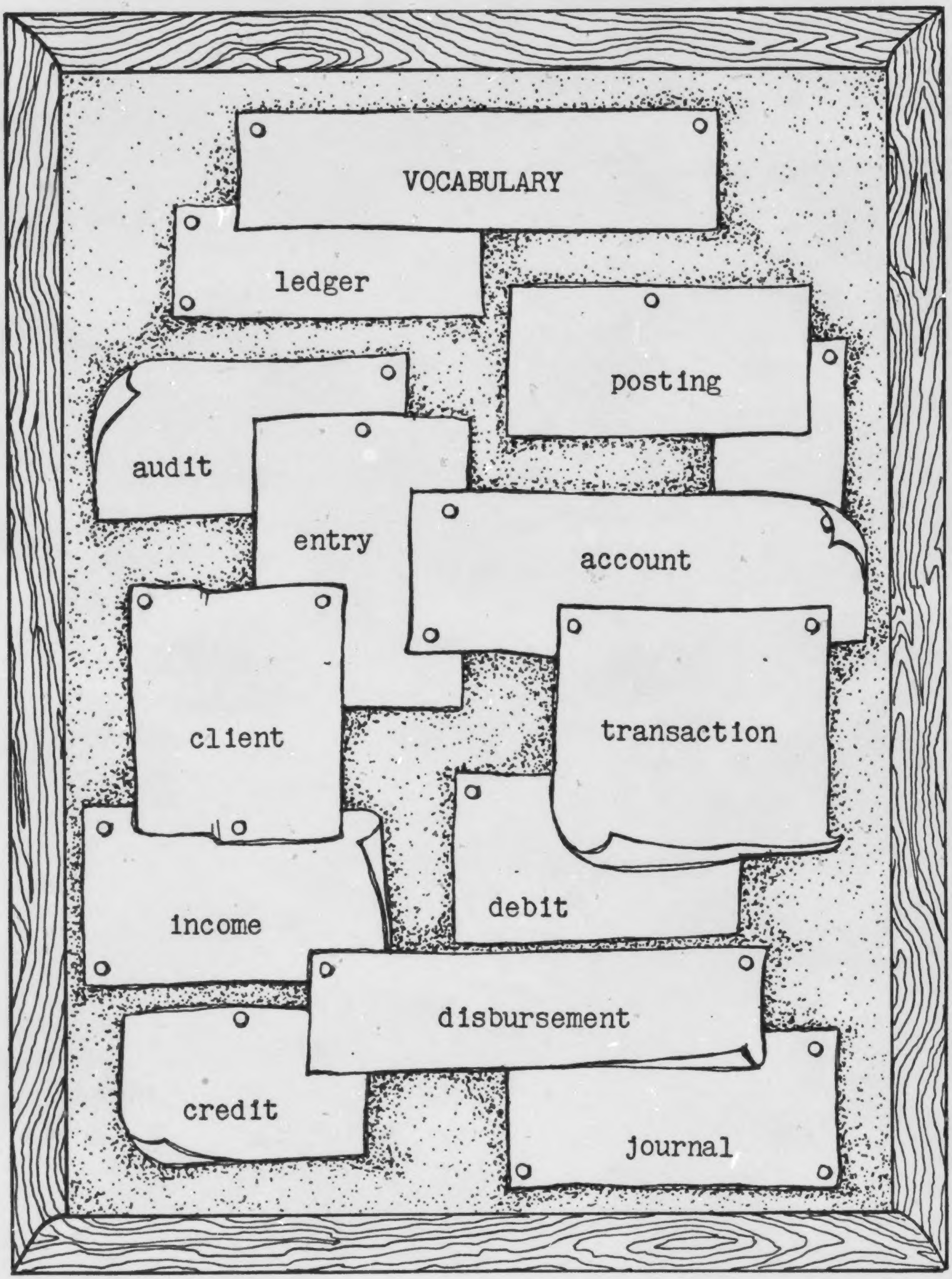
Focus pupil attention upon skills that make transfer from one job to another possible.

Broaden understanding about why people change jobs.

Provide information about the knowledge and skills needed by an accountant.

Structure experiences for the application of academic skills to simulated accountant's work.

Generalize the concept of keeping records.


VOCABULARY
ledger
posting
audit
entry
account
client
transaction
income
debit
disbursement
credit
journal

CASH ACCOUNTING

Fifth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *state at least one accounting skill that would be helpful in at least one other job.*

Attitudes and Appreciations Dimension

. . . *identify keeping one's financial records as a responsibility to oneself.*

Career Information Dimension

. . . *use a given number of accounting terms properly in conversation.*

Educational Awareness Dimension

. . . *apply one's own academic achievements to accounting procedures.*

. . . *assist a classmate in entering and posting transactions.*

Subject Matter Concepts

- Mathematics
  - Problem Solving
    - Earning, saving, spending money
    - Keeping accounts
    - Buying and selling

Preplanning Suggestions

Bookkeeping and accounting supplies and forms for record keeping
Materials to duplicate REACT pages

CASH ACCOUNTING

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Occupations have their own vocabularies.

Career Information

The content of this activity may be unfamiliar to the teacher. Examples and explanations of these procedures may be found in the "Bookkeeping" articles of major encyclopedias and in beginning texts for high school bookkeeping courses. Guidance may also be sought from a high school business teacher, the school secretary, or someone from the business office of the school system.

This activity seeks to familiarize pupils with the keeping of financial records by means of a cash journal and an accounts sheet. Prepare dittoed forms or show children how to draw lines on notebook papers to make the patterns needed. (Study the REACT page for examples.)

. . . *apply one's own academic achievements to accounting procedures.* PPO

. . . *use a given number of accounting terms properly in conversation.* PPO

Discuss the basic ideas of keeping financial records--income and disbursements. Clarify the need for a running record of transactions and an organized set of expenses. Start out with a simple journal form on the chalkboard and demonstrate how to enter a number of items such as the following transactions:

Apr. 1	Beginning balance	$1.14	
Apr. 1	Allowance	1.00	
Apr. 2	Pencils		$ .75
Apr. 4	Paper route	3.50	
Apr. 5	Magazine		.35
Apr. 6	Movie		1.50
Apr. 8	Allowance	1.00	
Apr. 10	Book		2.49

Be sure that the "beginning balance" idea is meaningful and help to clarify other key terms during the discussion. Identify date, purpose, and amount as essential components of a transaction. Encourage children to suggest more transactions for both income and disbursement. At an arbitrary point, add up both columns and post a new beginning balance. (See Example A on the example page.) Practice enough examples to make sure the entry and balancing processes are understood.

Learning achievement depends upon effort and ability.

Educational Awareness

. . . *assist a classmate in entering and posting transactions.* PPO

This journal pattern allows for a quick idea of cash on hand. Simply estimate what a new beginning balance would be at the time. At certain times, usually the end of a day, each journal entry is transferred (posted) to an appropriate column on an account page. (See Example B on the example page.)

Totals in these columns show how much is being spent for particular items. (See Example C on the example page.) At a given time, the total of the "IN" column of the journal should equal the totals of the income accounts; the total of the "OUT" column should equal the totals of the disbursement accounts. Encourage pupils to help each other understand the relationship between the journal entries and posting under account headings, and the information which each arrangement provides.

Work involves the acceptance of responsibility for a task.

Attitudes and Appreciations

. . . *identify keeping one's financial records as a responsibility to oneself.* PPO

It is important for a person to be able to make the transition from one job to another.

Coping Behaviors

. . . state at least one accounting skill that would be helpful in at least one other job. PPO

Discuss the advantages of being able to keep track of your own use of money. How might the accounts for disbursement help in budgeting? Lead thinking to consider what other occupations would require ability to keep these kinds of records (storekeepers, pay clerks, housewives, etc.). The ideas of inventorying as well as bookkeeping might be brought up here.

The REACT page suggests keeping track of (i.e., accounting for) one's own money transactions for a length of time. A preliminary discussion about sources of spending money for children, and things to spend it for, would be helpful in anticipating headings for different income and disbursement accounts.

CB/Level 5/5

"Ins and Outs"

EXAMPLE PAGE

EXAMPLE A. Finding a New Beginning Balance

Apr.	1	Beginning balance	1.14	
Apr.	1	Allowance	1.00	
Apr.	2	Pencils		.75
Apr.	4	Paper route	3.50	
Apr.	5	Magazine		.35
			5.64	1.10
Apr.	6	Beginning balance	4.54	

EXAMPLE B. Posting Journal Entries Onto Account Pages (from the transactions shown on previous page)

INCOME

Date	Allowance	Date	Earnings	Date	Misc.
Apr. 1	1.00	Apr. 4	3.50		
Apr. 8	1.00				

DISBURSEMENTS

Date	Food	Date	Entertainment	Date	School supplies	Date	Clothing	Date	Misc.
		Apr. 6	1.50	Apr. 12	.75			Apr. 5	.35
								Apr. 10	2.49

EXAMPLE C. Totals of Account Columns (from above)

Apr. 10	2.00	Apr. 10	3.50	Apr. 10	—

Apr. 10	—	Apr. 10	1.50	Apr. 10	.75	Apr. 10	—	Apr. 10	2.84

INS AND OUTS

Try being your own accountant for a week or month. Make some journal pages.

CASH JOURNAL

Date	Item	Amount in	Amount out

Make some account pages.

INCOME

Date	Allowance	Date	Earnings	Date	Misc.

DISBURSEMENTS

Date	Food	Date	Entertainment	Date	School Supplies	Date	Clothing	Date	Misc.

Start off with the money you have right now as your beginning balance.

Think about how your money comes and goes. What headings should you use for the accounts on your income and disbursement sheets? You may need more than one disbursement sheet if you spend for many different kinds of things.

Record each transaction on the journal page. At the end of each day transfer those transactions to their proper accounts.

At the end of the time period you chose, add up each account. Find out how much you spent for each kind of thing. How much money did you handle altogether? How much did you have left at the end of the month?

KEEPING TRACK

Fifth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *describe at least one social skill needed by an accountant that could be helpful in another occupation.*

Attitudes and Appreciations Dimension

. . . *explain the completion of an accounting task as a value to the accountant.*

Career Information Dimension

. . . *identify specific materials needed to keep track of objects or ideas in a particular situation.*

Subject Matter Concepts

- Social Studies
  - History
    - Changes in ways of living result in changed expectations.
    - Modern life has roots in the past.
  - Political Science
    - Rules for interaction
    - Effects of common goals
- Mathematics
  - Problem Solving
    - Keeping accounts
  - Figural
    - Graphs

Preplanning Suggestions

Materials to use as counters (pebbles, beads, etc.)
Materials to use for keeping records of room supplies
Magazines, newspapers, etc. if children's collections cannot be brought to school to catalog

KEEPING TRACK

The main purpose of this activity is to enlarge the context of accounting to include broader ideas of keeping track of things and the social conditions that may be implied by keeping records.

Help pupils to speculate about how a primitive human might have kept track of certain things of importance to him. For example:

- Use small stones as indicators of how many animals he has in a pen.
- Scratch lines in the ground or on the wall of a cave to mark the passage of days or full moons, etc.
- Use fingers and toes to do elementary counting.

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

. . . *explain the completion of an accounting task as a value to the accountant.* PPO

Occupations require the use of specific materials and equipment.

Career Information

. . . *identify specific materials needed to keep track of objects or ideas in a particular situation.* PPO

Discuss the implications of who is affected by record keeping of different types. What differences are there between keeping records for yourself and for others? When should a record keeper give or seek advice?

Encourage pupils to brainstorm about possible ways that objects in the classroom might be "accounted for." How could we keep track of quantities of things (books, pencils, time allotments, absentees, etc.) without using numeral notations? Paper markers, graphs, or a tallying system of some kind might be offered as suggestions. Draw attention, of course, to how much easier the use of modern arithmetic makes record keeping.

It is important for a person to be able to make the transition from one job to another.

Coping Behaviors

> . . . *describe at least one social skill needed by an accountant that could be helpful in another occupation.* PPO

In any case, discuss and emphasize the social as well as intellectual skills that are necessary for this type of work. Besides an attention to details and organization, one must be able to communicate his data to others--either orally or in writing. The collection and organization of objects or information also implies certain interpersonal considerations. An important feature of an accountant's work is dealing with a wide variety of clients with differing personalities and accounting needs. The accountant, thus, must also "keep track" of personal as well as business requirements of individuals. What other workers are concerned with a range of different clients or customers (e.g., doctors, salesclerks, teachers, bus drivers)?

The REACT page asks the child to become involved in collecting a certain kind of object. Suggestions are given and the teacher should be ready to help children go beyond that list if necessary or desirable. (A good supply of old magazines and newspapers could be made available as a last resort to provide sources of pictures which can be sorted out in any number of ways.) These collections may be new or may be a continuation of some pupils' hobbies. The main issue is for the children to invent ways for systematically recording their objects--a review of the cash accounting in the first activity of this infusion strategy can be helpful in this regard. After an agreed upon period of time, each pupil should have a classmate audit his recording system. It is possible that this activity may be carried out by pairs of children rather than individually.

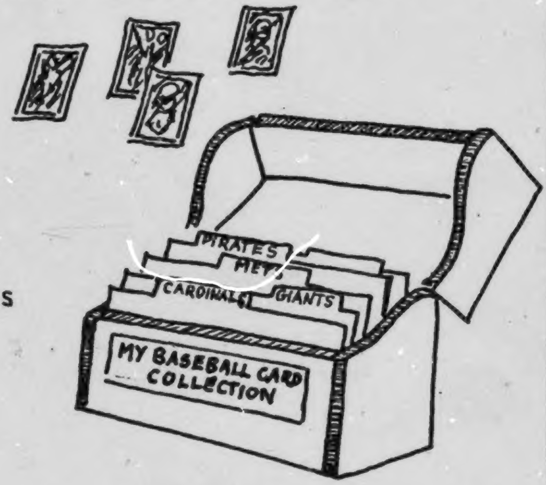
CB/Level 5/6

"Check and Double Check"

CHECK AND DOUBLE CHECK

Auditing is when records are examined and judged by someone other than the person keeping the records. An accountant may do both jobs at different times. He may keep records that someone else audits, or he may audit someone else's records.

To help yourself practice keeping records and auditing, make a collection of objects that are not expensive and are easy to store. You could use things like:



pop bottle caps
or cereal box tops
or labels from cans
or leaves from trees and bushes
or pictures from magazines
or buttons
or playing cards
or baseball or football cards
or any other kind of stuff you think you might like to gather.

As your collection grows, make up some way of keeping track of how many of each kind of thing you have.

Later, ask one of your classmates to audit your records and see if that person agrees with your accounting work.

HERE'S A SWITCH

Fifth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *list at least two reasons why a person might decide to change to, or from, accountancy as a career.*

. . . *role play an accountant seeking to change jobs.*

. . . *report on how an adult acquaintance described his change from one job to another.*

Attitudes and Appreciations Dimension

. . . *discuss accountancy as an occupation for both men and women.*

Career Information Dimension

. . . *describe similarities and differences between the work environment of an accountant and at least one other kind of worker.*

. . . *discuss potentially pleasant or unpleasant aspects of accounting work.*

Educational Awareness Dimension

. . . *explain how changes in jobs may require new knowledge or skills.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Discussion skills
    - Role playing
- Social Studies
  - Economics
    - Moving for economic motives
    - Supply and demand
  - Sociology-Anthropology
    - Individual characteristics
    - Values and purposes

Preplanning Suggestions

Audio-visual aids, books about accountants' work
Accountant to interview (school secretary)

HERE'S A SWITCH

It is important for a person to be able to make the transition from one job to another.

Coping Behaviors

Learning is a lifelong process.

Educational Awareness

Occupations have their own work settings.

Career Information

A great many tasks can be performed by men or women.

Attitudes and Appreciations

Help pupils to recall previous subconcepts in this framework--the relation of skills and tasks, performance requirements, and work settings. Apply these ideas to the job expectations of an accountant. What skills and knowledge does an accountant need for what tasks? How might his job description change? What work conditions or personal feelings might encourage someone to change to accountancy or to leave it?

. . . *list at least two reasons why a person might decide to change to, or from, accountancy as a career.* PPO

. . . *explain how changes in jobs may require new knowledge or skills.* PPO

. . . *describe similarities and differences between the work environment of an accountant and at least one other kind of worker.* PPO

. . . *discuss accountancy as an occupation for both men and women.* PPO

Use audio-visual aids or printed materials to add to knowledge about the accountant's work. Bringing a local accountant or bookkeeper into the classroom for an informal discussion about his work, his feelings about his work, what he might otherwise do with his knowledge and skills, etc., can help to make the occupation more realistic. In any case, stress the possibilities of changing positions either from accounting to a different field or from one kind of accounting job to another. What reasons might there be for a particular change? What adjustments might be anticipated?

It is important for a person to be able to make the transition from one job to another.

Coping Behaviors

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

It is important for a person to be able to make the transition from one job to another.

Coping Behaviors

. . . *role play an accountant seeking to change jobs.* PPO

. . . *discuss potentially pleasant or unpleasant aspects of accounting work.* PPO

These discussions and studies may be followed up by short skits depicting job changes or written assignments in the form of stories or essays. Help children relate these ideas to personal situations when they must alter their own behavior, use of materials, mode of dress, etc., because of changed conditions or feelings.

. . . *report on how an adult acquaintance described his change from one job to another.* PPO

The REACT page provides a brief outline to guide a pupil in interviewing an adult. The topic is changing jobs and children should be reminded to zero in on reasons for a change, as well as the resulting adjustments. If some pupils have difficulty finding a person to interview, there should be a teacher available who has at least changed teaching positions.

Use the results of the interviews to reinforce the ideas of possibilities of transfer from one job to another.

CB/Level 5/7

"Check on Changes"

CHECK ON CHANGES

Almost every worker changes jobs sometime in his life.

Interview an adult whom you know has worked at more than one job.

This person might be a friend of the family, a neighbor, a relative, or one of your parents.

Here are some questions you might use:

What was the job you left and what was your new job?

When did you make this change?

What made you first think about changing jobs?

Did any other people help you make your decision?

What did you need to do to get ready for the new job?

How was your new job different from the one before?

What new things did you need to learn?

GREENER GRASS?

Fifth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *cooperate in collecting and organizing data about the frequency and nature of job changes by local adults.*

Attitudes and Appreciations Dimension

. . . *relate accountant work to the needs of a given number of workers in the community.*

Educational Awareness Dimension

. . . *discuss job changes as examples of requiring new knowledge or skills.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Interviewing
  - Grammar and Usage
    - Labeling and classifying

- Mathematics
  - Figural
    - Tables and graphs

- Social Studies
  - Economics
    - Supply and demand
    - Division of labor
    - Community workers
  - Sociology-Anthropology
    - Values and purposes

Preplanning Suggestions

List of local public accountants (income tax, etc.)
Materials to make duplicate forms for each child for gathering data

GREENER GRASS?

It is important for a person to be able to make the transition from one job to another.

Coping Behaviors

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

This activity seeks to gather data on the frequency of job changes in the local community and on the relationship of public accountancy to different jobs. Practically every business has a regular bookkeeper of some kind. This emphasis is on the need for outside help from time to time. Public accountants depend on these needs for much of their work.

Help children to organize a pattern of canvassing whereby individuals or pairs would be responsible for contacting two or three different adults.

> . . . *cooperate in collecting and organizing data about the frequency and nature of job changes by local adults.* PPO
>
> . . . *relate accountant work to the needs of a given number of workers in the community.* PPO

Have the class prepare a form on which pupils can record the names of jobs left with the names of new jobs in each case. There should also be allowance for noting which of these jobs (old or new) needed the services of an accountant other than someone regularly employed. In other words, does the business seek outside help with its bookkeeping? Such a form could simply be:

PERSON	OLD JOB	Need Acct	NEW JOB	Need Acct

In the "Need Accountant" column, a yes or no could be sufficient, although in yes cases it would be interesting to know exactly what the services were. It is possible that persons might be named or identified with letters or numbers. Also, allow space for any one person to have made more than one change.

Learning is a lifelong process.

Educational Awareness

> . . . *discuss job changes as examples of requiring new knowledge or skills.* PPO

Help children to compile and organize their data. Graphs or tables might be used to visualize frequencies that particular jobs appear. A corollary activity could be to gather data on the length of time each of the jobs was held.

The REACT page sends the pupil into the neighborhood for information about the ways a local business handles its money. Anticipate distinctions between income, overhead, and expenses. Consideration is suggested for the storage and banking of the money handled during a business day. Also, what kinds of money are involved--e.g., cash, checks, credit cards, vouchers.

CB/Level 5/8

"How We Keep Track"

HOW WE KEEP TRACK

Every business must have some system of keeping track of its money.

In this activity you will try to find out about the accounting system of one nearby business.

Choose a service station, department store, drugstore, lumber yard, gift shop, or some other business in or near your neighborhood. Ask permission to talk with someone about the ways they handle money.

Find out:

FROM WHAT SOURCES DOES MONEY COME INTO THE BUSINESS?

WHAT FORMS OF MONEY ARE ACCEPTED?

HOW IS THE MONEY STORED DURING THE DAY?

WHEN AND WHERE IS THE BUSINESS'S MONEY BANKED?

FOR WHAT EXPENSES MUST THE BUSINESS SPEND MONEY?

RELATED MATERIALS

Budget, The--Today and Tomorrow (Sound Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Budgeting: Why Do People Have to Wait for What They Want? (Sound Filmstrip) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1973.

Courtesy at School (Film, Color, 11-min.) Coronet Instructional Films, Coronet Building, 65 East South Water Street, Chicago, Illinois 60601, 1969.

Economics: Newspaper Boy (Film, Color, 10-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, For future release.

Ideas, Images, and I (Book) Franco, et. al. American Book Company, 300 Pike Street, Cincinnati, Ohio 45202, 1970

School Problems: Getting Along With Others (Film, Color, 12-min.) Bailey Film Associates, 11559 Santa Monica Boulevard, Los Angeles, California 90025, 1972.

So You Want to Be an Accountant (Book) Fred H. Rohn. Harper and Row, Scranton, Pennsylvania 18512, 1971.

Widening Occupations Roles (Kit) Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611.

Your Future in Accounting (Book) Edmond Locklear. Richards Rosen Press, Inc. New York, New York, 1963.

ACCOUNTANT

Accountants compile and analyze business records and prepare financial reports, such as profit and loss statements, balance sheets, cost studies, and tax reports. The major fields of employment are public, management, and government accounting. Public accountants are independent practitioners who work on a fee basis for businesses or for individuals. Management accountants handle the financial records of a particular firm on a salary basis. Government accountants work on financial records of government agencies and often audit businesses and individuals whose dealings are subject to government regulations.

Public accountants are likely to specialize in auditing--i.e., in reviewing financial records and reports and giving opinions as to their reliability. They also advise clients on tax and other financial matters. Most management accountants provide information for decision making, and may specialize in taxes, budgeting or internal auditing. Many federal government accountants work as internal revenue agents, investigators, and bank examiners, as well as in regular accounting positions.

More than 500,000 accountants were employed in 1958, of whom more than 100,000 were certified public accountants. About 2% of the CPA's and less than 20% of all accountants are women. Nearly three-fifths of all accountants do management accounting work, and one-fifth are engaged in public accounting. Over 10% work for federal, state, and local government agencies. A small number teach in colleges and universities. Accountants are employed wherever business, industrial, or governmental organizations are located. Most work in large metropolitan areas.

Training can be obtained in universities, colleges, junior colleges, accounting and private business schools, and correspondence schools. A bachelor's degree with a major in accounting or a closely related field is increasingly an asset, and for better positions it may be required. For beginning positions, the federal government requires four years of college or an equivalent combination of education and experience.

The CPA examination, administered by the American Institute of Certified Public Accountants, is used by all states to establish CPA certification. Most states require CPA candidates to be college graduates, and 90% of recent successful candidates have been college graduates. Future requirements may require a master's degree.

Accountants who want to get to the top in their profession usually find it necessary to continue their study of accountancy and related problems. Even experienced accountants may spend many hours in study and research in order to keep abreast of legal and business developments that affect their work. More and more accountants are studying computer operation, programming, mathematics, and quantitative methods in order to adapt accounting procedures to new methods of processing data. Although advancement may be rapid for capable accountants, those having inadequate preparation are likely to be assigned to routine jobs and find themselves handicapped in obtaining promotions.

Accounting employment is expected to expand rapidly in the 1970's because of the greater use of accounting information in business management; complex and changing tax systems; the growth of business corporations; and the increasing use of accounting services by small business organizations. Electronic data processing systems are replacing manual preparation of records, and may result in reduction or elimination of junior accountants at the lower levels. On the other hand, the larger quantities of data will require additional highly-trained accountants for preparation, administering, and analyzing of such data.

Public accountants are likely to work long hours under heavy pressure during the tax season. They do most of their work in their clients' offices, and sometimes do considerable traveling. A few management and government accountants also do much traveling and work irregular hours, but the majority remain in one office and work between 35 and 40 hours per week.

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 27-29.

LINKS WITH THE SOIL

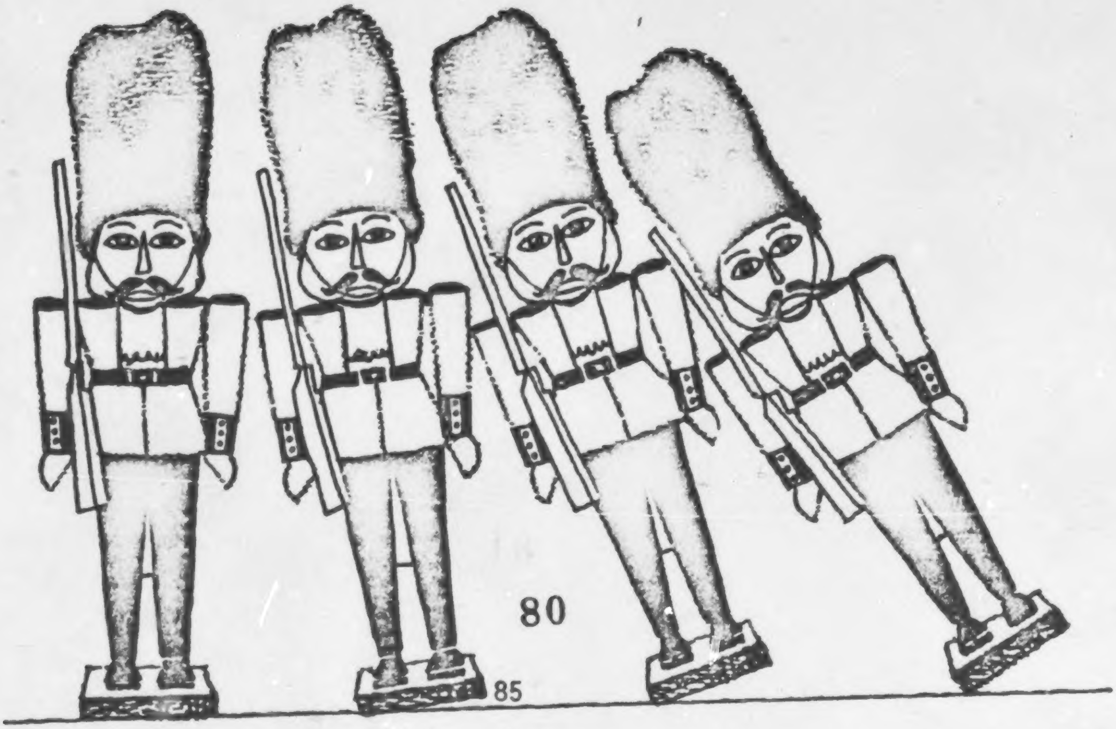
FIFTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS: Decision making can precipitate chain reactions.

OCCUPATIONAL FOCUS: Soil Conservationist

ACTIVITIES
IN THIS INFUSION STRATEGY

1. Little Drops of Water
2. The Lay of the Land
3. How's and Why's
4. A Special Tool
5. Other Conservationists



Teacher Goals

Teacher goals of this strategy combine a Decision Making Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Soil Conservationist. In this perspective the teacher's goals are to:

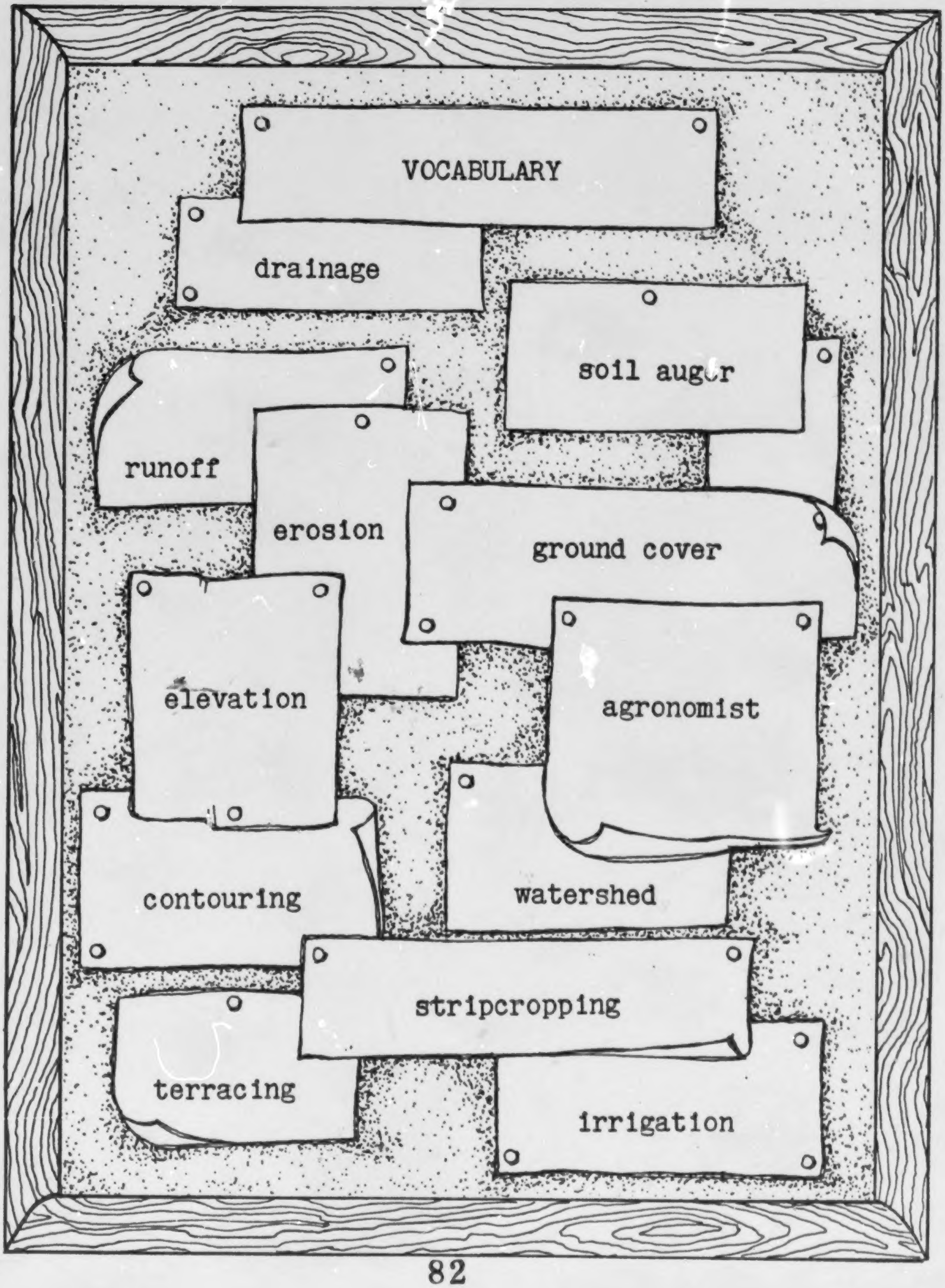
Structure experiences in which chain reactions may follow from children's decisions.

Provide opportunities for pupils to increase knowledge and appreciation of the role of soil in life support systems.

Enlarge children's perspective concerning positive efforts which have been made toward soil reclamation and conservation.

Expand pupils' awareness of the role of the soil conservationist as one of the cluster of environmental control occupations.

Encourage pupils to relate their own aptitudes and interests to the activities, requirements, and tools of the work done by the soil conservationist.


VOCABULARY
drainage
soil auger
runoff
erosion
ground cover
elevation
agronomist
contouring
watershed
stripcropping
terracing
irrigation

LITTLE DROPS OF WATER

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *follow directions in constructing and using a water sprinkler.*

. . . *identify soil conditions as parts of chain reactions resulting from specific decisions.*

Career Information Dimension

. . . *describe at least two different ground covers as they relate to erosion.*

. . . *use conservation vocabulary properly in conversation.*

Subject Matter Concepts

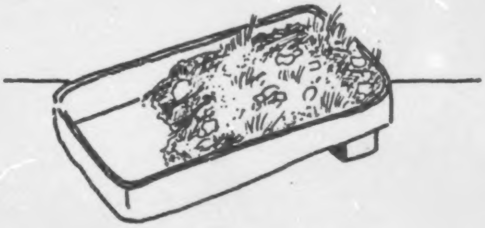
Science
  Earth and Sky
    Soil can be conserved.
    Erosion and depletion of soil
  Biology
    Control of environment of living things

Preplanning Suggestions

Several waterproof pans about 4 inches deep to be used as landscape areas
Soil and other materials for making simple landscape areas
Watering devices which sprinkle (See Activity for a suggestion.)
Visuals of soil erosion areas, particularly in the immediate vicinity
Library books about conservation
Local news stories about water supplies and soil erosion

LITTLE DROPS OF WATER

Secure several shallow, waterproof containers which can be used to build a model landscape of soil, gravel, clay, etc. Inexpensive aluminum roasting pans (measuring about 12" x 20" x 4") are a good possibility, but any similarly proportioned object could be a reasonable minimum size. The idea is to have about a good square foot of landscape about three inches deep, in a container that can be tilted slightly to simulate runoff water.



Occupations have their own work settings.

Career Information

. . . *describe at least two different ground covers as they affect erosion.* PPO

Have children work in small groups. Be sure they are aware that they are simulating possible work settings for a soil conservationist. Discuss different ways of arranging the materials for experiments on the effects of falling and running water. One end of the container, of course, should be reserved for the residue from the runoff.

Decision making can precipitate chain reactions.

Decision Making

. . . *follow directions in constructing and using a water sprinkler.* PPO

A "rainmaker" can be made from a half-gallon milk carton. On the side opposite the spout opening, poke two rows of holes near the

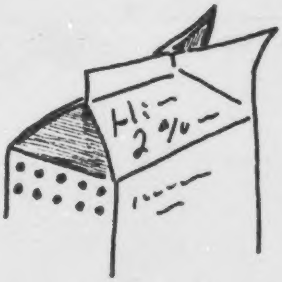
Occupations have their own vocabularies.

Career Information

Decision making can precipitate chain reactions.

Decision Making

top edge. The carton can be nearly filled with water, then used to sprinkle the landscape.



> . . . *use conservation vocabulary terms properly in conversation.* PPO

Encourage different groups to secure different types of soils, as well as to build different topographical arrangements. Keep track of conditions as originally set up and whatever changes occur along the way. (Part of an old comb may be used to "plow" the soil. Quick-sprouting annual rye grass or bits of sod from one's yard can suffice for "crops" or ground covers.) Pictures and discussions of various methods of plowing and planting can help to offer ideas. This stage is also a good time for developing a relevant vocabulary.

As the landscapes are built and sprinkled, have pupils maintain records not only of the changing conditions but also of the decisions that they have made in setting up and working with their projects. To provide a wider range of conditions, the amount and frequency of sprinkling, the angle of tilt, and the plantings themselves may be varied.

> . . . *identify soil conditions as parts of chain reactions resulting from specific decisions.* PPO

A good way to culminate this activity is to have groups compare their various preparations and results. Look for descriptions of chain reactions resulting from specific decisions.

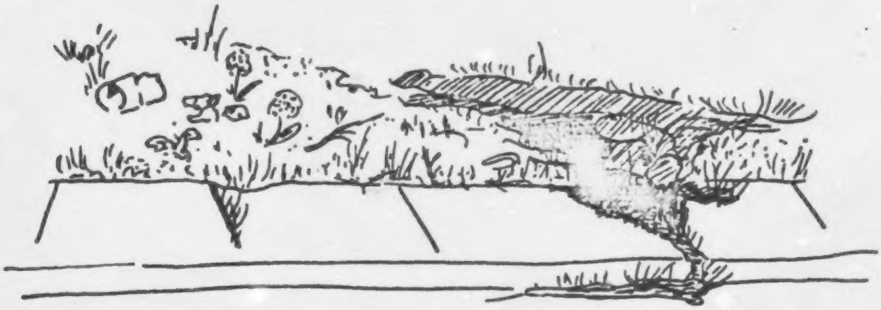
The accompanying REACT page provides directions for more direct study of real soil erosion. Help children practice careful guessing about possible causes as well as describing their observations.

DM/Level 5/1

"Soil Erosion"

SOIL EROSION

Soil erosion takes place when soil is moved from one place to another. The most common eroding agents in nature are water and air. As water and air move with varying rates of speed and force, they pick up or push along particles of soil which are not securely in place. Erosion is evident in places where soil is missing, or where soil has been deposited after having been moved.



Explore around your neighborhood for evidence of soil erosion. Use three steps to help your thinking:

1. Tell where the evidence is located.
2. Describe why you think it suggests erosion.
3. Make a careful guess about the conditions that caused the erosion.

Use the chart on the other side of this paper to record your observations.

Share your observations with your teacher and classmates.

EVIDENCES OF SOIL EROSION

Location	Description of Evidence	Apparent Cause

THE LAY OF THE LAND

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *describe at least two significant changes in U. S. soil conditions resulting from decisions in the past.*

Educational Awareness Dimension

. . . *identify particular knowledge about soil conditions in the U. S. that one has learned in school.*

Subject Matter Concepts

Science
  Earth and Sky
    Soil can be conserved.
    Erosion and depletion of soil
  Biology
    Control of environment of living things

Social Studies
  History
    Acts and events have consequences.

Preplanning Suggestions

Books, films, filmstrips, etc., about soil erosion in America's past (dust bowl, floods, forest fires, etc.)
Magnifying glasses or microscopes
Large plastic containers, soil, earthworms
Newspapers, farm journals, gardening books and magazines
Name of a local conservationist to interview

Using a film, filmstrip, and/or relevant printed materials, help pupils to expand their awareness of several problems concerning the soil in the present and past in the United States, e.g., the depletion from excessive cotton farming in the South or erosion due to flooding in the Mississippi basin.

Career-oriented learning may take place in school or out of school.

Educational Awareness

. . . *identify particular knowledge about soil conditions in the U. S. that one has learned in school.* PPO

Decision making can precipitate chain reactions.

Decision Making

. . . *describe at least two significant changes in U. S. soil conditions resulting from decisions in the past.* PPO

Choose the materials for presentation to show especially the chain reactions from particular decisions in U. S. history. Help pupils to realize that not doing something can be as significant a decision as taking action. Keep a reasonable balance, too, between "good" efforts in dealing with soil conservation and those which eventually led to deterioration. Reports, either oral or written, may be based upon these studies.

The REACT page for this activity calls attention to worms as a specific soil need. Magnifying glasses or a microscope can be a big help for observing the soil conditions. This study could easily spin off into the many different kinds of worms and their respective habitats.

DM/Level 5/2

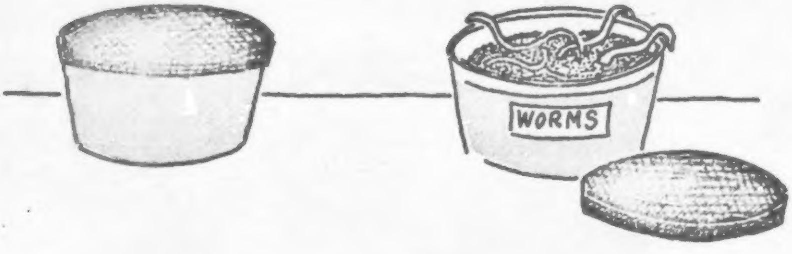
"In Terms of Worms"

IN TERMS OF WORMS

What differences do worms make in soil?

Let's try to find out.

Collect enough of one kind of soil to nearly fill two half-gallon clear plastic containers, such as used to package ice cream. Sift the soil carefully to remove any worms and other sizeable living things that may be present.



Fill each container with equal parts of the soil, allowing about an inch of air space at the top. Moisten each with a gentle sprinkling of water, place a dozen or so earthworms in one of the containers, and put both lids on. (Mark the container with the worms.)

Remember, life under the soil is geared for darkness, so the containers should be stored in a cupboard or closet, or covered with dark cloth or paper.

After about two weeks, check the top and sides of the soil in the container with the worms. Are there any evidences of earthworm activity? Carefully remove a few spoonfuls of soil from the "wormy" container, and inspect it--use a magnifying glass or a microscope if you can. Do the same for an equal portion of soil from the other container.

HOW ARE THE TWO SAMPLES SIMILAR?

HOW ARE THE TWO SAMPLES DIFFERENT?

Let your specimens "set" for another two weeks, and see what changes may have taken place.

Why would a soil conservationist, a farmer, or a gardener be interested in earthworms? Check the classified ads in farming or gardening magazines for information about people who raise earthworms commercially.

HOW'S AND WHY'S

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *identify at least two problem soil conditions that can be traced back to previous decisions.*

Educational Awareness Dimension

. . . *explain how environmental changes require new knowledge and skills.*

Subject Matter Concepts

- Language Arts
  - Reading
    - Making inferences
    - Appreciating moods of characters
  - Writing Skills
    - Putting ideas in order
    - Characterization and plot

- Science
  - Earth and Sky
    - Soil can be conserved.
    - Erosion and depletion of soil

Preplanning Suggestions

Bulletin board area for conservation materials
Farm journals, gardening magazines, agriculture catalogs
Local ecology problems

Learning is a lifelong process.

Educational Awareness

Decision making can precipitate chain reactions.

Decision Making

Plan a soil conservation bulletin board with the pupils. Have them bring in clippings from newspapers and magazines that deal with conservation of the soil. These may range anywhere from the generalized pleas of Smokey the Bear to specific reclamation projects and problems of varying scales.

> . . . *explain how environmental changes require new knowledge and skills.* PPO
>
> . . . *identify at least two problem soil conditions that can be traced back to previous decisions.* PPO

Ecological studies offer excellent opportunities for identifying chain reaction conditions. As the supply of clippings accumulates, some may show the results of previous decisions and others the anticipation of future conditions. In any case, chain reactions may be traced "back" to decisions to act or not to act or "ahead" with respect to alternative courses of action. These perspectives on environmental decisions may then be summarized in written form.

The accompanying REACT page provides practice in the general idea of chain reactions rather than the subject of soil. Other fables or short stories could also be similarly used.

DM/Level 5/3

"Results from Decisions"

RESULTS FROM DECISIONS

A decision can lead to a chain reaction of events.

Do you remember the fable of the Lion and the Mouse?

A Mouse woke a Lion by running across its paws. The Lion decided to let the Mouse go when it begged for its life. Later, the Mouse helped the Lion to escape from a hunter's net.

Why do you suppose the Lion let the Mouse go?

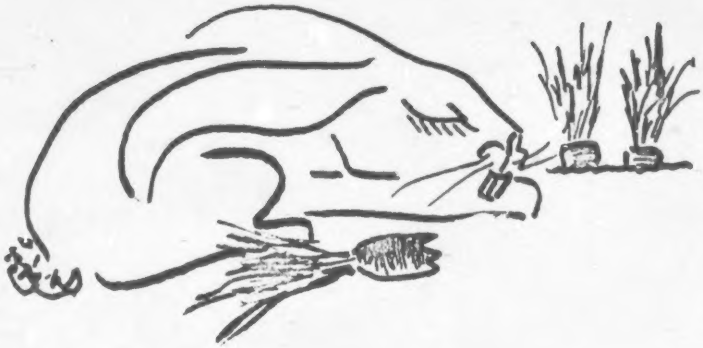
What other possible chain of events might have followed from the Lion's decision to let the Mouse go free?

What events or conditions may have followed after the Mouse helped the Lion escape from the hunter's net?

What chain of events might have followed if the Lion had NOT decided to let the Mouse go free?

What circumstances or feelings might have helped the Lion to decide NOT to let the Mouse go?

Do you remember the fable of the Tortoise and the Hare?



The Tortoise and the Hare were racing. The Hare decided to take a nap during the race, and the Tortoise passed him by and won the race.

Why do you suppose the Hare decided to take a nap?

What other chain of events might have followed from the Hare's decision to take a nap during the race?

What events or conditions may have followed after the Tortoise had won the race?

What chain of events might have followed if the Hare had NOT decided to take a nap during the race?

What circumstances or feelings might have helped the Hare to decide NOT to take a nap?

A SPECIAL TOOL

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *follow directions for constructing and using a soil auger.*

Attitudes and Appreciations Dimension

. . . *discuss the expectations about women's use of the tools and equipment of soil conservation work.*

Career Information Dimension

. . . *describe a tool devised for a specific task of a soil conversationist.*

. . . *list tools or equipment required by workers in at least two occupations other than soil conservation.*

Educational Awareness Dimension

. . . *identify a specific physical skill required in soil conservation.*

Subject Matter Concepts

- Science
  - Scientific Method
    - Investigative techniques
    - Special instruments
    - Categorization

Preplanning Suggestions

- Several lengths of hollow metal tubing such as pipe
- Real soil auger from parent or farm supply store
- Local area farmer, conservationist, or Farm Bureau representative to meet with the class
- Arrange for soil samples from several areas to be visited by children from the class. (Family yards might do.)
- Catalogs of machinery and equipment

A SPECIAL TOOL

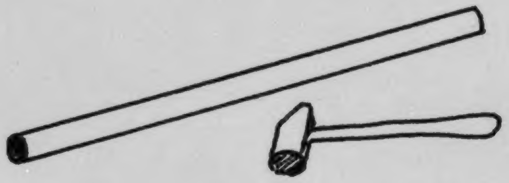
A soil auger is a hollow metal tube about five feet long and up to three inches in diameter. A handle bar on top is borne down upon and turned to drive the auger into the earth--forcing a core of soil into the tube. The soil is then removed for analysis. This activity directs the construction of homemade augers.

Decision making can precipitate chain reactions.

Decision Making

. . . *follow directions for constructing and using a soil auger.* PPO

Have pupils bring in pieces of pipe or other rigid, hollow metal tubing between three and four feet long to be used as the main bodies of soil augers. (Keep the lengths proportionate to the sizes of the children.) If attaching a turning handle is beyond available means, a heavy hammer or a fencepost driver can be used to drive the tubing or pipe into the ground.



Occupations require the use of specific materials and equipment.

Career Information

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

. . . *describe a tool devised for a specific task of a soil conservationist.* PPO

. . . *identify a specific physical skill required in soil conservation.* PPO

If possible, borrow a real soil auger from a hardware store, farm bureau, or parent. This would also be a fine opportunity to invite adults of the community to help in the construction and use of the augers. Call attention to the physical characteristics that are implied by this kind of a tool. One must be tall enough and strong enough to operate it. Adaptations will likely be needed to allow for varying physiques of class members. At any rate, encourage the effort to at least try to make some sort of "corer" to collect samples of soil.

To remove the core of soil from the auger, wad up some newspaper tightly and with a broomstick or other narrow pole push it firmly against the soil from the top of the tube. Keep the tube nearly horizontal as the core is expelled to avoid losing its possible pattern of layers.

Compare the various cores collected by the pupils according to textures, color, and whatever other contents may appear.

Occupations require the use of specific materials and equipment.

Career Information

. . . *list tools or equipment required by workers in at least two occupations other than soil conservation.* PPO

A great many tasks can be performed by men or women.

Attitudes and Appreciations

. . . *discuss the expectations about women's use of the tools and equipment of soil conservation work.* PPO

Follow-up discussion may be directed toward highly specialized tools and machines used in other occupations--e.g., the polygraph in police work, the bathyscaphe in oceanography, the manure spreader in agriculture. Would women be able to use these kinds of tools and equipment?

The REACT page for this activity is a direct follow-up from the actual use of a soil auger or its equivalent.

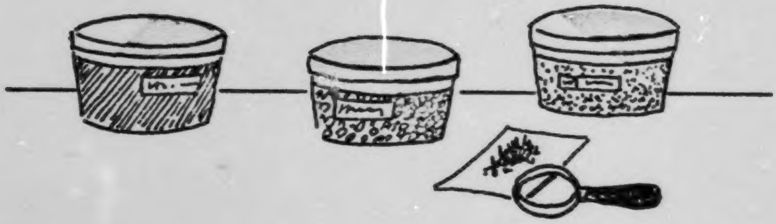
The collection and observation of soil samples could also become an on-going activity shared by a few individuals or the entire class.

DM/Level 5/4

"Soil Samples"

SOIL SAMPLES

Using pint-sized or quart-sized clear plastic or glass containers which have covers, collect samples of several different kinds of soil. Note where and when you find each sample.



As you have time, remove some of the soil from a container and inspect it carefully--use a magnifying glass or a microscope if you can. What kinds of materials are in the soil?

How do they differ in color?

How do they differ in size?

How do they differ in shape?

How do they differ in hardness or softness?

When not studying your soil specimens, keep the containers covered to keep them from drying out.

ON THE REVERSE SIDE OF THIS PAPER IS A
SAMPLE FORM FOR YOU TO USE TO KEEP A
RECORD OF YOUR OBSERVATIONS.

Specimen Number ________

DATE COLLECTED	PLACE COLLECTED
COLORS	
LIVING THINGS	
OTHER MATERIALS	

OTHER CONSERVATIONISTS

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . point out at least two possible alternatives for cooperation between different types of conservationists.

Attitudes and Appreciations Dimension

. . . relate the services of a soil conservationist to at least two other occupations.

. . . identify the particular contributions made to society by at least two kinds of conservation workers.

Career Information Dimension

. . . compare the preparatory requirements of at least two conservation occupations.

Educational Awareness Dimension

. . . identify academic or physical skills needed by a particular kind of conservation worker.

Subject Matter Concepts

- Social Studies
  - Economics
    - Different uses of environment
    - Technology produces changes.
    - Interdependence of geographical regions
  - Sociology-Anthropology
    - Individual characteristics
    - Values and purposes in behavior

Preplanning Suggestions

Books, audio-visuals about conservationists for room resources

Lists or directories which list possible conservationists, such as the Farm Bureau, park rangers, university science departments, etc.

OTHER CONSERVATIONISTS

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

Career development includes progression through stages of educational and occupational training.

Career Information

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Assign individuals or small groups to research several occupations closely related to the soil conservationist. For example: agronomist, geologist, range manager, or other workers dealing more directly with aspects of water or mineral utilization.

> *. . . relate the services of a soil conservationist to at least two other occupations.* PPO

The "Conservation" article of an encyclopedia is a good source for suggestions concerning job expectations and descriptions which may be relevant to this activity. Encourage children to think in terms of the interrelationships of all fields of conservation.

Reports on findings may be presented in written, oral, or possibly in dramatized form.

> *. . . identify the particular contributions made to society by at least two kinds of conservation workers.* PPO
>
> *. . . compare the preparatory requirements of at least two conservation occupations.* PPO
>
> *. . . identify academic or physical skills needed by a particular kind of conservation worker.* PPO

The objectives listed here are beginning suggestions. This activity can be a good opportunity to blend in a number of the subconcepts from Attitudes and Appreciations, Career

Decision making can precipitate chain reactions.

Decision Making

Information, and Educational Awareness as well as the Decision Making chain reaction subconcept.

> *. . . point out at least two possible alternatives for cooperation between different types of conservationists.*
> PPO

The chain reaction idea might be seen in the shared views of two or more kinds of conservationists considering alternative strategies in dealing with a definite environmental problem.

The REACT page following this activity provides an opportunity for the pupil to give some active thought to his own feelings about conservation jobs. Help children to be conscious of a wide range of conservation jobs as well as the reasons they happen to like or dislike a particular one.

DM/Level 5/5

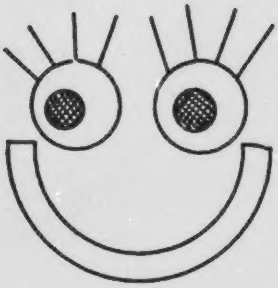
"Maybe Yes and Maybe No"

MAYBE YES AND MAYBE NO

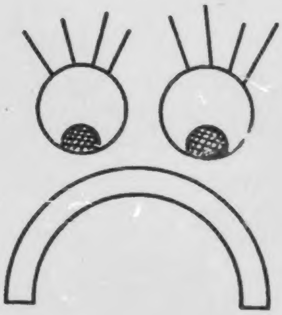
You and your classmates have studied different kinds of conservation workers. Now, give some careful thought to how those occupations appeal, or do not appeal, to your own interests and abilities.

Use the beginning sentences below as "starters" to tell how you feel right now about a conservation job that you think you would do well in and one that you probably would not do well in. In each case, give your reasons by telling about the job and yourself.

OF THE CONSERVATION JOBS WE HAVE STUDIED, I THINK I WOULD MOST LIKE TO BE



OF THE CONSERVATION JOBS WE HAVE STUDIED, I THINK I WOULD LEAST LIKE TO BE



RELATED MATERIALS

Conservation for Today's America (Sound Filmstrips) Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, Illinois 60614, 1970.

Cooperation, Sharing, and Living Together (Multi-Media Kit) Educational Projections Corporation, 1911 Pickwick Avenue, Glenview, Illinois 60025, 1971.

Developing Basic Values (Sound Filmstrip) Sextant Systems, Inc., 3048 North 34th Street, Milwaukee, Wisconsin 53210, 1972.

Ecological Imbalance: Six Systems Disturbed (Filmstrips) Eye Gate House, Inc. 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Job Family Series Booklets (20 Booklets) Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611.

Making the Desert Green (Film, Color, 16-min.) Encyclopaedia Britannica Educational Films, Inc., 425 North Michigan Avenue, Chicago, Illinois 60611, 1970.

Soil Conservation (Overhead Transparencies) Creative Visuals, Box 1911-3, Big Spring, Texas 79720, 1970.

Urban Ecology (Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

A Vacant Lot (Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

SOIL CONSERVATIONIST

Soil conservationists supply farmers, ranchers, and others with technical assistance in planning, applying, and maintaining measures and structural improvements for soil and water conservation on individual holdings, groups of holdings, or on watersheds. Farmers and other land managers use this assistance in making adjustments in land use; protecting land against soil deterioration; rebuilding eroded and depleted soils; stabilizing runoff and sediment-producing areas; improving cover on crop, forest, pasture, range, and wildlife lands; conserving water for farm and ranch use and reducing damage from flood water and sediment; and in draining or irrigating farms or ranches.

Services include: maps presenting inventories of soil, water, vegetation and other details for conservation; information on the proper land use and the treatment suitable for the planned use of each field or part of the farm or ranch, groups of farms or ranches, or entire watersheds; and estimates of the relative cost of, and expected returns from, various alternatives of land use and treatment.

After a landowner or operator decides upon a program, the conservationist records the relevant facts as part of a plan which, together with the maps and other information, constitute a plan of action for conservation farming or ranching. The soil conservationist then gives the land manager technical guidance in applying and maintaining the conservation practices.

Most soil conservationists are employed by the federal government, mainly by the U. S. Department of Agriculture's Soil Conservation Service and the Bureau of Indian Affairs in the Department of the Interior. Some are employed by colleges and state and local governments; others work for banks and public utilities.

A Bachelor of Science degree with a major in soil conservation or a related agricultural science are the minimum requirements for professional soil conservationists. Those who have unusual aptitude in the various phases of the work have good chances of advancement to higher salaried technical administrative jobs.

Opportunities in soil conservation will expand because government agencies, public utility companies, banks, and other organizations are becoming interested in conservation. Other new openings will occur in college teaching, particularly at the undergraduate level. Normal turnover will produce some openings as well.

HOW THE ADS ADD UP

FIFTH EXPERIENCE LEVEL INFUSION STRATEGY

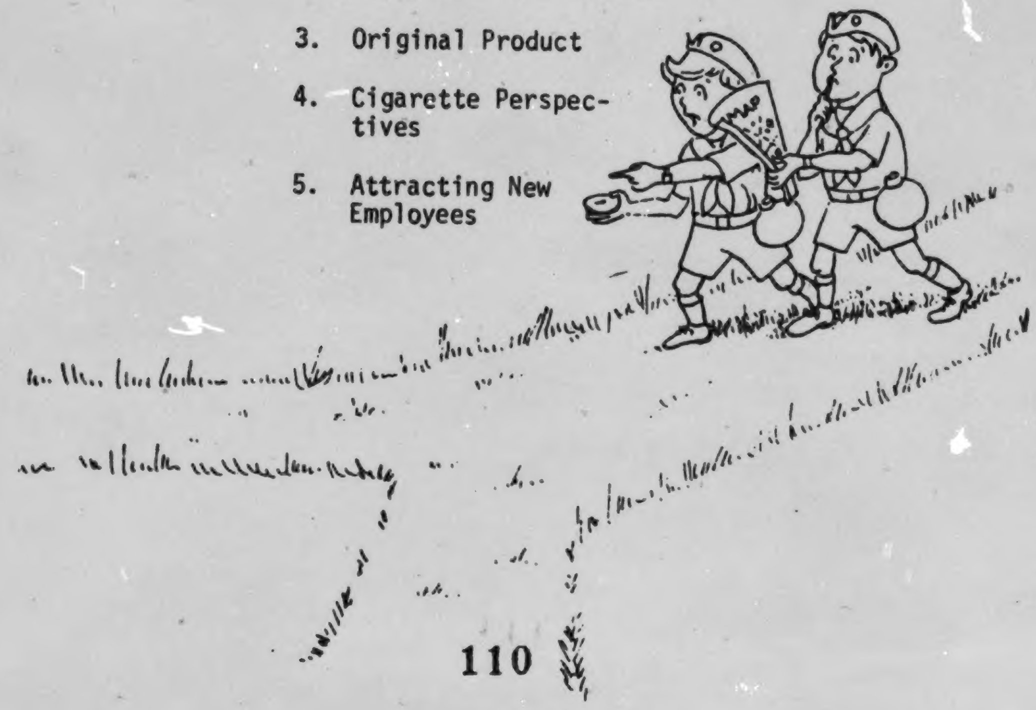
CAREER DEVELOPMENT FOCUS: Setting goals can be enhanced by analyzing decision-making processes.

OCCUPATIONAL FOCUS: Advertising Copywriter

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Analysis of Advertisements
2. Advertiser and Client
3. Original Product
4. Cigarette Perspectives
5. Attracting New Employees



Teacher Goals

Teacher goals of this strategy combine a Decision Making Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Advertising Copywriter. In this perspective the teacher's goals are to:

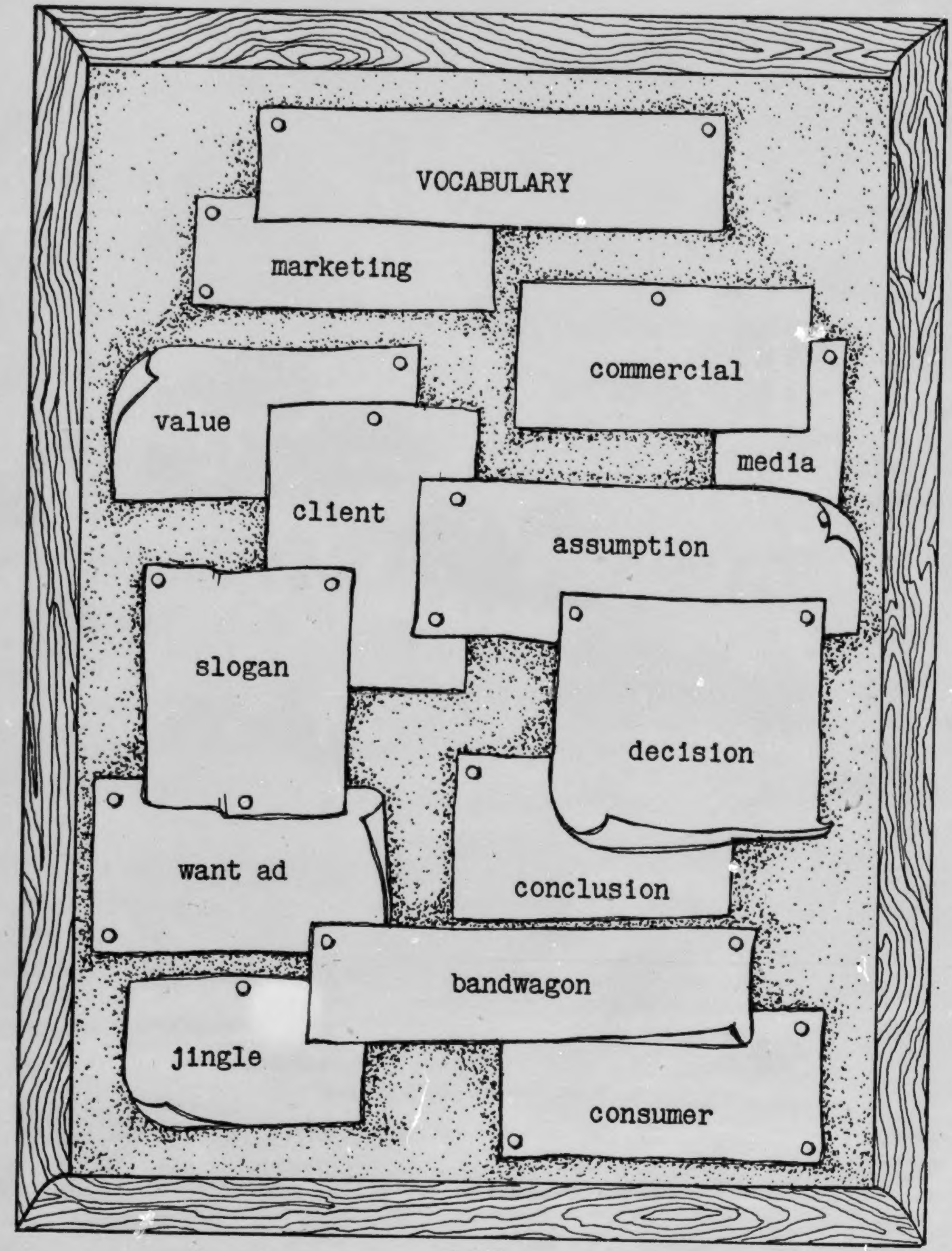
Direct children to seek out relationships between decisions and assumptions.

Expand awareness of the effort required to construct and interpret a persuasive argument.

Help pupils to distinguish positive and negative features of advertising.

Provide opportunities for children to relate their own values to current products and services.

Encourage an understanding of advertising's interdependent position in the world of work.


VOCABULARY
marketing
commercial
value
client
media
assumption
slogan
decision
want ad
conclusion
bandwagon
jingle
consumer

ANALYSIS OF ADVERTISEMENTS

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *explain how certain values and information support a particular behavior in school.*

. . . *identify the assumed facts and values related to a particular advertisement.*

Attitudes and Appreciations Dimension

. . . *analyze particular examples of advertising copywriters' work.*

. . . *discuss the different feelings one has upon finishing the study of advertising techniques.*

Educational Awareness Dimension

. . . *identify a thinking skill which one has learned at school.*

. . . *identify the construction of an argument as an advertising copywriter's skill.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Discussion
  - Grammar and Usage
    - Classifying
  - Reading
    - For information
    - Making inferences

Preplanning Suggestions

Have on hand many old magazines with advertising.
Notebooks or other ways to arrange ads in categories
Bulletin board area for an advertising display

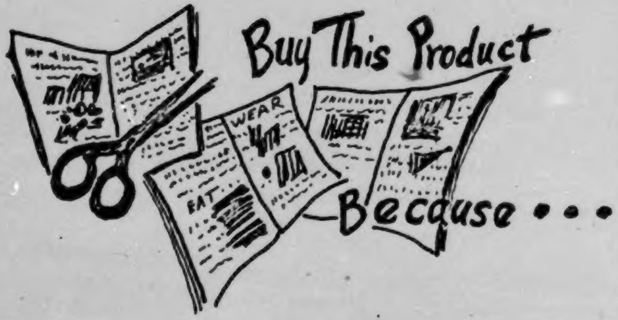
ANALYSIS OF ADVERTISEMENTS

Career-oriented learning may take place in school or out of school.

Educational Awareness

Setting goals can be enhanced by analyzing decision-making processes.

Decision Making



Review the ideas of setting goals, seeking alternatives, identifying priorities, etc., as set forth in the subconcepts of previous levels. In a general discussion, the children should focus on the relationship between a decision and the values and information that lead to it.

. . . *identify a thinking skill which one has learned at school.* PPO

. . . *explain how certain values and information support a particular behavior in school.* PPO

Help children to identify particular assumptions (of values, information, wants, etc.) upon which certain routine decisions are made. E.g., Why did I choose to wear what I am wearing today? Why do we raise our hands before speaking? Why do we have lunch at noon? Why did I choose to read a certain book? The "becauses" here represent assumptions (or premises) which lead to the eventual choice. Another way of thinking about this relationship is to consider the words "therefore," or "so," or "thus" as possible clues--what comes after that word is the decision (or conclusion), what comes before are the combined effects of knowledge and wants or needs.

From a wide variety of old magazines, have each child cut out several examples of advertisements. Use two or three ads to illustrate the implied or overt reasoning they contain. That is, if the decision that the copywriter is seeking to encourage is ". . . therefore, you should buy this product," what information or values does he state or imply to lead you to that conclusion?

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

Setting goals can be enhanced by analyzing decision-making processes.

Decision Making

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

. . . *analyze particular examples of advertising copywriters' work.* PPO

. . . *identify the assumed facts and values related to a particular advertisement.* PPO

. . . *identify the construction of an argument as an advertising copywriter's skill.* PPO

As the children's collections of ads accumulate, lead into some scheme for classifying the types of arguments used in the ads. For instance, the repetitive slogan/jingle approach, endorsements by famous people, the everybody-is-doing-it bandwagon approach, or appeals to such ideas as ecology, personal appearance, health, or consideration of loved ones. To preclude the possibility of branding all advertising as underhanded or misleading, help children to look especially for examples of positive appeals to factual data, social needs, or integrity of the manufacturer. The issue here is to study values and information as they are assumed to lead to certain conclusions, not to become unduly suspicious or cynical.

This clipping and categorizing of ads may be organized as a notebook compiled by each child and/or a bulletin board display.

. . . *discuss the different feelings one has upon finishing the study of advertising techniques.* PPO

Upon completion of most of this activity, help children to review and share their feelings and ideas about advertising techniques as examples of decision making.

The REACT page which follows offers practice in reaching conclusions. Remind children that "therefore," or "so," etc., usually indicates that a conclusion is being reached from a certain line of reasoning. All the examples on the page are called conditional arguments, whose first statement has two parts--an "if" clause (the condition) and a consequent. The two valid treatments for this kind of statement are when the second statement in the series . . .

(a) . . . affirms the "if" clause, which in turn affirms the consequent.

(b) . . . negates the consequent, which in turn negates the conditional clause.

For instance,

If A exists, then B exists.
A does exist.
Therefore, B exists.

or, If A exists, then B exists.
B does not exist.
Therefore, A does not exist.

Affirming the consequent does NOT necessarily affirm the "if" clause. Negating the "if" clause does NOT necessarily negate the consequent. (Check a beginning book in logic, under Conditional Syllogisms, for more specific examples and variations.)

DM/Level 5/6

"Reaching Conclusions--
Locating Assumptions"

REACHING CONCLUSIONS

If...?
Then...?
Therefore:

Each blank line represents a missing statement in a series of three statements. The third statement in each group is a conclusion which follows from the other two statements. Read carefully, then fill in a statement that makes good sense with the other two.

____

Whenever it is warm, we go swimming.
It is warm today.

Therefore, ______________________________

____

If I eat my spinach, I get an extra dessert.
I ate my spinach.

Therefore, ______________________________

____

If it is raining, the grass is wet.
The grass is not wet.

Therefore, ______________________________

____

Whatever Lassie eats, my dog must eat.
My dog does not eat Clinkeroos.

Therefore, ______________________________

____

If a product makes me beautiful, I will use it.
Super Soap will make me beautiful.

Therefore, ______________________________

____

Compare your own write-ins with those of some of your classmates. If there are any differences, try to figure out why.

HINT: Notice that the first statement has two parts, and the second statement says either "yes" or "no" about one of those parts. What does the conclusion say about the other part in each case?

Now turn the page over, and try some more groups with other parts missing.

LOCATING ASSUMPTIONS

Using the same kind of reasoning as on the other side of this paper, fill in the blanks in each of the groups of sentences below. In these cases, the first statement is missing, so we must think back to how the series must have started.

____

Bill Jones uses blue toothpaste.

So, I will use blue toothpaste.

____

I found a camel.

Therefore, I got out of the desert.

____

The grass is not wet.

So, the sprinkler must not be on.

____

I do not have a headache.

So, I must not have missed breakfast.

____

Everybody likes Kicky-Cola.

So, I will like Kicky-Cola.

____

Mary is not beautiful.

So, Mary must not be using Magic Moonbeams.

Magic
Moonbea

ADVERTISER AND CLIENT

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *analyze the values involved in choosing a topic for an advertising activity.*

Attitudes and Appreciations Dimension

. . . *take part in a dramatization of advertising workers in a specific work setting.*

. . . *describe the relationship of an advertiser's services to the needs of his client.*

Career Information Dimension

. . . *use particular advertising terms properly in conversation.*

Subject Matter Concepts

Language Arts
   Listening and Speaking
      Role play with dialogue
   Writing Skills
      Advertisements

Preplanning Suggestions

Samples of packaging materials--boxes, bottles that indicate attractiveness of the contents
Library books and encyclopedias which help explain terms used in advertising

ADVERTISER AND CLIENT

A given work setting requires certain policies and procedures.

Attitudes and Appreciations

Occupations have their own vocabularies.

Career Information

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

Setting goals can be enhanced by analyzing decision-making processes.

Decision Making

Set up small groups to role play meetings involving members of an advertising agency and representatives of a manufacturer of a particular product or service. Help children to review the ideas of information and values as bases for arguments in order to provide a reasonable basis for their discussions. Allow each group to choose its own sales item.

. . . *take part in a dramatization of advertising workers in a specific work setting.* PPO

. . . *use particular advertising terms properly in conversation.* PPO

Help children to anticipate also the kinds of ideas and terms used in talking about marketing, packaging, and advertising content and media which they might use.

. . . *describe the relationship of an advertiser's services to the needs of his client.* PPO

The simulated meeting should include some awareness of the mutual needs of the advertising personnel and their clients. In addition, this activity offers an opportunity for pupils to project their own knowledge and values, as well as their understanding of society's wants and needs, into a specific context.

. . . *analyze the values involved in choosing a topic for an advertising activity.* PPO

After the simulation, encourage speculation concerning why each group chose the product it did, as well as the ideas for marketing that were discussed.

The REACT page which follows deals with slogans, jingles, and trademarks. Some kind of warm-up to help pupils identify some common examples would probably be helpful.

DM/Level 5/7

"Remember Me?--Trademarks"

REMEMBER ME?

A slogan is a brief phrase or sentence used to identify a product in some way. A jingle is a slogan set to music. From television, radio, magazines, and newspapers, you are probably already familiar with many slogans and jingles.

Which ones do you know that advertise CEREALS?

CEREAL
CEREAL
FREE

Which ones do you know that advertise SOFT DRINKS?

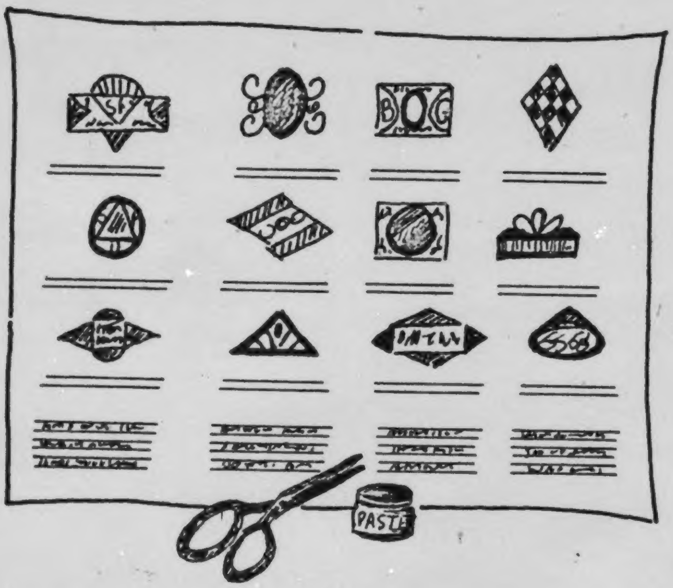
Which ones do you know that advertise other products?

Compare your lists with those of some of your classmates.
How many different slogans and jingles can you identify?
Could you make up a game, or a test, with them?

TRADEMARKS

Trademarks are also a way that producers have of keeping the identity of their products well-known.

Bring in several old magazines or newspapers, and cut out a dozen or so trademarks from advertisements. (Remember to keep track of what each one stands for.)



Paste your cut-outs on a piece of paper or light cardboard, and put a blank line under each one to give a classmate a place to write in the name of the product represented.

You might mix up the names of the products and write them at the bottom of the paper to give your friends some clues to go on. Keep an answer key so that they can check themselves.

To make more games like this, or just to make a collection, you could get trademarks from labels and packages as well as from newspapers and magazines.

ORIGINAL PRODUCT

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *list the information used for making decisions about producing an imaginary product.*

Attitudes and Appreciations Dimension

. . . *explain how the advertising copywriter's work is related to that of other advertising personnel.*

Educational Awareness Dimension

. . . *identify skills used by the designer of a cereal box.*

Subject Matter Concepts

- Social Studies
  - Economics
    - Supply and demand
    - Using natural resources
  - Sociology-Anthropology
    - Community's wants and needs
    - Technology produces changes.
    - Neighborhoods have character.

Preplanning Suggestions

A supply of cereal boxes for each child
Plain paper to cover cereal boxes in preparation for new covers to be designed by class members

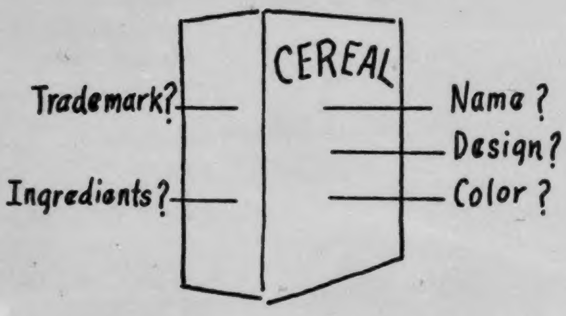
ORIGINAL PRODUCT

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Setting goals can be enhanced by analyzing decision-making processes.

Decision Making



Specialized occupations result in an interdependent society.

Attitudes and Appreciations

Have each child bring two or three empty cereal boxes to school. Cover one box carefully with plain paper as the starting point for "inventing" a new cereal to be marketed. Share and study the extra boxes as possible guides for creating an original covering for a box containing an imaginary cereal.

. . . *identify skills used by the designer of a cereal box.* PPO

. . . *list the information used for making decisions about producing an imaginary product.* PPO

Help pupils to identify the grains from which cereals are made, and to become aware of the kinds of information that a cereal box normally provides. What kinds of pictures or designs are used? What evidence suggests an "adult" cereal or a "child" cereal? How do the sizes of the boxes differ?

Encourage children to keep track of the decisions they make while they are practicing and refining their work. Set some minimum standards for completing the box design, but allow for possible expansion of individual interests into accompanying materials, such as jingles, ads for magazines, radio or television commercials, or posters.

. . . *explain how the advertising copywriter's work is related to that of other advertising personnel.* PPO

Some thought in this activity can be transferred to the specialized work required within an advertising agency--copy, art work, media contacts, etc. If one person did the entire cereal box design, how many different kinds of work would he do?

The REACT page which follows seeks to apply reasoning skills to a positive need. Children may require a review of the values and information perspective for developing an argument. Encourage cooperative efforts along these lines.

DM/Level 5/8

"Reasoning for Action"

REASONING FOR ACTION

Choose three or four classmates to get together and plan an advertising campaign to encourage people in your neighborhood to support an environmental improvement project. Use the kinds of reasoning you have been studying.

For example, an anti-littering argument could use:

(INFORMATION)
Descriptions of kinds of litter in certain places
Actions that can be helpful
Laws against littering

PLEASE PLACE LITTER HERE

(VALUES)
The unpleasantness of litter
The dangers of litter
The enjoyment of helping to improve things

(CONCLUSIONS)
Help to clean up litter
Avoid causing further litter
Encourage others to help clean up and prevent further litter

Look around your community, and decide upon some need for improvement. Would it help to have less automobile traffic in certain places? Should dogs and cats be kept from running loose? Are there places where more trees or shrubs ought to be planted? Could people be encouraged to use bicycles for some of their transportation?

Whatever you decide to zero in on, plan your advertising strategy according to the ideas of pointing out information, appealing to values that most people share, and making your conclusion a good, solid suggestion that follows from the information and values.

CIGARETTE PERSPECTIVES

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *show that pro and con arguments for cigarettes are based on differing values.*

Attitudes and Appreciations Dimension

. . . *describe a particular advertisement which is acceptable in one setting but not in another.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Discussion
  - Reading
    - Making inferences
  - Writing Skills
    - Changing points of view
- Social Studies
  - Sociology-Anthropology
    - Values and purposes in behavior
    - Common wants and needs
  - Economics
    - Government regulations

Preplanning Suggestions

Collect advertisements or information about advertisements that are unacceptable for some stated reason in one media but not others.

Watch for news articles about pros and cons of advertising.

CIGARETTE PERSPECTIVES

A given work setting requires certain policies and procedures.

Attitudes and Appreciations

Setting goals can be enhanced by analyzing decision-making processes.

Decision Making

Discuss the peculiar position of cigarette advertising with regard to different types of media. Where do we see or hear cigarette advertising? Where do we see or hear arguments against cigarettes? Why is cigarette advertising restricted to certain media? Collect and share a good supply of examples of both approaches.

> . . . *describe a particular advertisement which is acceptable in one setting but not in another.* PPO
>
> . . . *show that pro and con arguments for cigarettes are based on differing values.* PPO

Lead children to identify that the using and non-using of cigarettes are decisions that the consumer is being encouraged to make. Seek out the information and values which are offered by each side in order to reach opposing conclusions. Upon what assumptions does each side base its case? What appeals are made, either openly or by implication?

What other products are restricted to certain kinds of advertising media? Why?

The following REACT page continues the idea of opposing arguments. The theme is expanded beyond cigarettes to allow practically any topic which appeals to individuals or groups. Discuss the identification of an issue as a topic for which pro and con arguments can be formulated in order to help pupils to deal with the business of arguing for opposing sides.

DM/Level 5/9

"Pros and Cons"

PROS AND CONS

Do!
Anti
Pro?
Con?
Don't!

We are familiar with the two approaches to cigarette sales--one says "do," and the other says "don't." Each side uses different values or information and reaches a different conclusion. The side which argues for something is often called "pro," and the side which argues against is called "con" or "anti."

Try to apply a pro and a con argument to a product other than cigarettes, or to an idea.

For instance, you could argue about setting limits to the sizes of automobiles. The "pro" viewpoint could aim to tell how long, or how wide, or how powerful cars should be. The "con" could argue some reasons for allowing anyone to make or buy any size automobile they want to.

What kinds of information would help each side to state its case?
What values might be appealed to?
How could the "pro" conclusion (or the "con") be made very strong?

DEBATE
Pro
Con

Whenever an issue is raised, both "pro" and "con" arguments are possible.

For instance, you might argue the pros and cons of

. . . a change in the rules of baseball, or some other game;

. . . why every child must go to school;

. . . a school dress code;

. . . candidates for an elected office.

No doubt, you and your friends can think of many other possibilities. Whatever the topic you choose to work with, remember that besides writing your ideas down on paper, you might like to make a poster or even have a debate with a classmate.

ATTRACTING NEW EMPLOYEES

Fifth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *define the values of a particular establishment as implied by its requirements for personnel.*

Career Information Dimension

. . . *describe an occupational setting in terms of its requests for personnel.*

. . . *identify a particular skill needed by a person who would answer a given help-wanted ad.*

Subject Matter Concepts

- Language Arts
  - Writing Skills
    - Advertisements
  - Listening and Speaking
    - Role play with dialogue

Preplanning Suggestions

Acquire posters or job announcements about a specific job.
Have in the classroom help-wanted advertisements from newspapers or magazines.
Provide many kinds of materials for making posters.

ATTRACTING NEW EMPLOYEES

Occupations have their own work settings.

Career Information

Setting goals can be enhanced by analyzing decision-making processes.

Decision Making

Occupations require special aptitudes.

Career Information

Provide a recruitment poster or a magazine advertisement for a particular job to serve as the basis for a discussion about job requirements. Talk about the kinds of information that an organization might stress in order to attract new personnel.

> *. . . describe an occupational setting in terms of its requests for personnel.* PPO

> *. . . define the values of a particular establishment as implied by its requirements for personnel.* PPO

Use the content of a goodly number of help-wanted ads to add further perspective to the requirements of various types of employers. Clarify these requirements as decisions based on certain values of the employers.

Have children, individually or in small groups, choose a particular business, industry, etc., for which they will advertise for new employees. Stress aptitudes required as well as work settings offered.

> *. . . identify a particular skill needed by a person who would answer a given help-wanted ad.* PPO

As children develop their ideas, allow latitude in their choice of media--written copy, posters, want ads, etc.

The REACT page pretends that this advertising activity has brought a promising candidate and the prospective employer together for an interview, and also a newly hired worker together with his co-workers. Give pupils an opportunity to anticipate possible formats, settings, conversational content, etc. during their preparation of skits. Remind them to involve the job description and the applicant's, or new worker's, personal characteristics.

DM/Level 5/10

"Welcome to the Job"

WELCOME TO THE JOB

Congratulations! Your advertising campaign for new employees was a great success. The next step is to set up interviews for a candidate to join your organization.

Plan a short skit with some of your classmates to show what might take place during such an interview with someone who "answered" your company's advertisements for new employees.

What should the employer have ready to ask?
What should the candidate bring to the interview?
What should the candidate ask about?
How could both parties insure a good beginning and a good ending to the interview?
Who shall play the parts?

EMPLOYER ______________________________

CANDIDATE ______________________________

EXPERIENCED WORKERS ______________________________

____

(over)

JOB INTERVIEWS
QUALIFICATIONS

Another possible skit to continue the series could be showing how experienced workers help a new employee get acquainted with his new surroundings.

What kind of a place should the workers be in?
How will the new worker behave?
Will there be special kinds of equipment to work with?
Do the workers wear uniforms?
How do the experienced workers help the new person?
Who shall play the parts?

NEW WORKER ____

EXPERIENCED WORKERS ____

____

____

____

RELATED MATERIALS

The Advertising Agency Executive (Sound Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Assumptions (Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Can You Believe Advertising? (Sound Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Deciding (Film, Color, 14-min.) Centron Educational Films, 1621 West Ninth Street, Lawrence, Kansas 66044, 1973.

Shopping for Goods and Services: Which One Do You Buy? (Sound Filmstrip) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1972.

What I Like to Do (Interest Inventory) Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611.

Written on Film (Book) Peter Sagara. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1971.

Your Attitude Is Changing (Book) Elwood Chapman. Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois 60611, 1967.

ADVERTISING COPYWRITER

Advertising copywriters create the headlines, slogans, and texts that attract buyers. They collect information about products and the people who might use them. They use psychology and writing techniques to prepare copy especially suited for readers or listeners and for the type of advertising medium to be used. Copywriters may specialize in copy that appeals to certain groups, or that deals with items such as packaged goods or industrial products. In advertising agencies, copywriters work closely with account executives, although they may be under the supervision of a copy chief.

More than one-third of advanced advertising workers are employed in agencies, with half of those in the New York City and Chicago areas. However, there are many independent agencies in other cities, and many leading agencies operate branch offices outside the major centers. Those not employed in agencies work for manufacturing companies, stores, and other organizations having products or services to sell; for advertising media, such as newspapers and magazines; and for printers, engravers, art studios, product and package designers, and others who provide services to advertisers and advertising agencies.

Most advertising jobs require a flair for language, both spoken and written. Since every assignment requires individual handling, a liking for problem-solving is also important. Advertising personnel should have a great interest in people and things to help them sell their ideas to their superiors, to advertisers, and to the public. They must be able to accept criticism and to gain important points with tact.

Young people planning to enter the advertising field should get some experience in copywriting or related work with their school publications and, if possible, through summer jobs connected with marketing research services. Some large advertising organizations recruit outstanding college graduates and train them through programs covering all aspects of advertising work. Most beginners, however, have to locate their own jobs by applying directly to possible employers. Young men sometimes begin as mail clerks or as messengers who pick up and deliver messages and proofs from departments and agency clients. A few begin as junior copywriters. One of the best avenues of entrance for women is through advertising departments of retail stores.

Most new jobs will be created in advertising agencies during the 1970's as more and more advertisers turn their work over to agencies. Those seeking to enter the field will face stiff competition for beginning jobs, but opportunities should be favorable for the highly qualified.

Higher starting salaries are paid most frequently in very large firms that recruit outstanding college graduates; the lower salaries are earned in stores and small agencies. Salaries of experienced advertising workers vary according to the type of employer--advertisers, communications media, agencies.

Advertising workers frequently work under great pressure. Working hours are sometimes irregular due to deadlines. At the same time, advertising offers a satisfying career to people who enjoy variety, excitement, and a constant challenge to their creative ability, and who can meet the competition. Advertising workers have the satisfaction of seeing their work in print or hearing it over the radio or television even though they remain unknown to the public at large.

Adapted from: U. S. Department of Labor. Occupational Outlook Handbook, 1970-71 edition. (Washington, D.C.: Government Printing Office), 1971. pp. 30-32.

BUILDING WITH STYLE

FIFTH EXPERIENCE LEVEL INFUSION STRATEGY

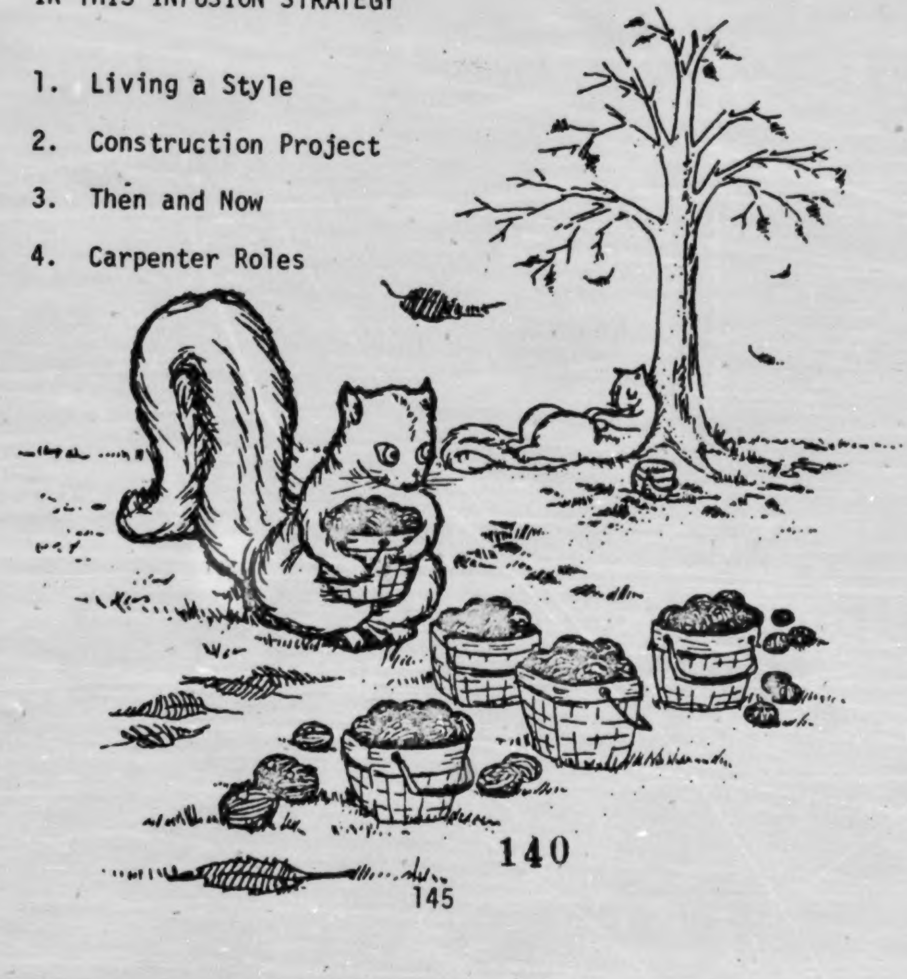
CAREER DEVELOPMENT FOCUS: Relationships exist between desired lifestyles and career monetary rewards.

OCCUPATIONAL FOCUS: Carpenter

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Living a Style
2. Construction Project
3. Then and Now
4. Carpenter Roles



Teacher Goals

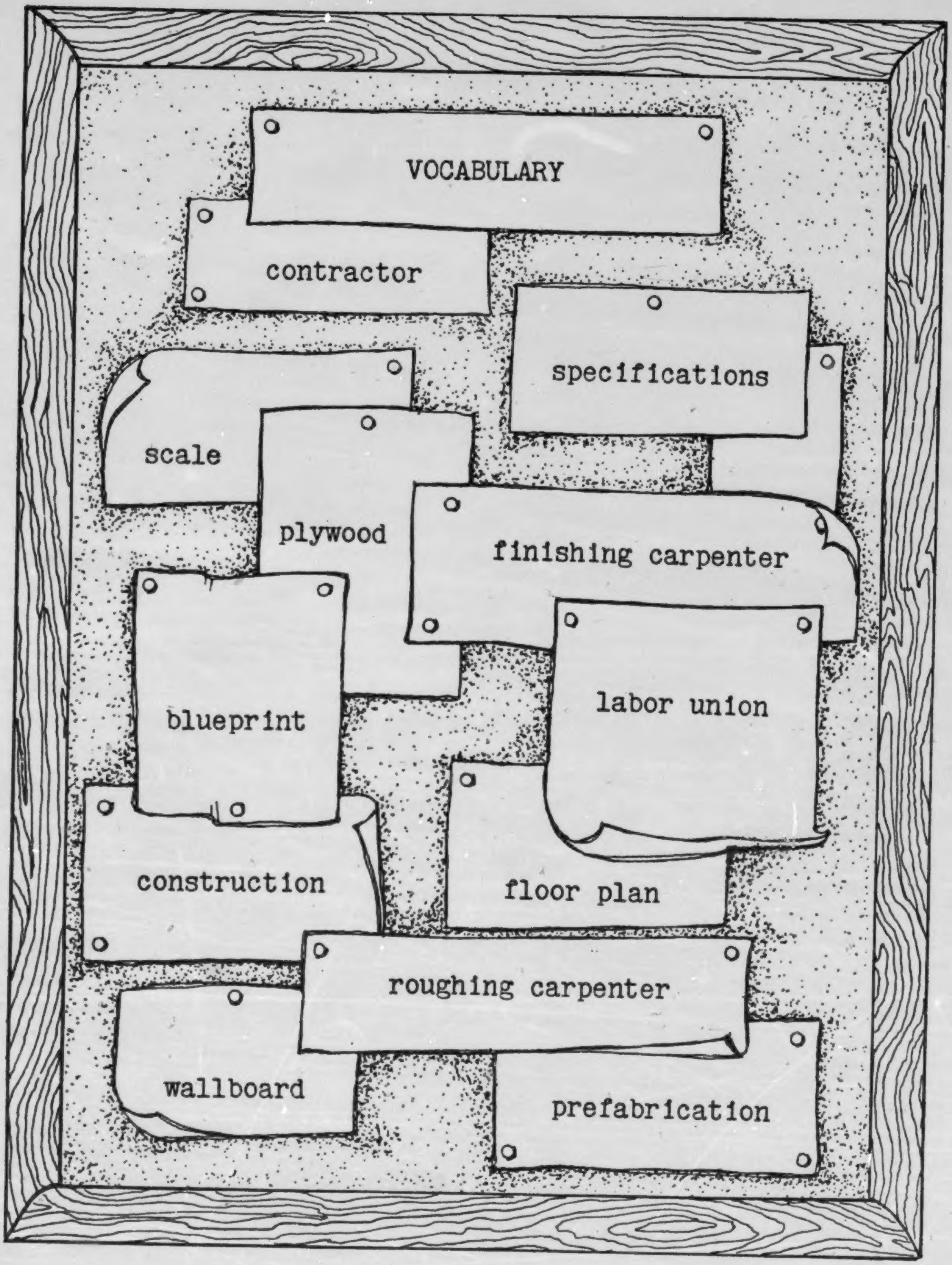
Teacher goals of this strategy combine a Lifestyle Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Carpenter. In this perspective the teacher's goals are to:

Help pupils to relate lifestyle to income.

Enhance historical and geographical understanding of the role of carpentry in society.

Structure situations for pupils to use selected carpentry tools.

Encourage appreciation of the knowledge and skills needed by a carpenter.


VOCABULARY
contractor
specifications
scale
plywood
finishing carpenter
blueprint
labor union
construction
floor plan
roughing carpenter
wallboard
prefabrication

LIVING A STYLE

Fifth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *relate housing conditions to income.*

. . . *draw to scale two floor plans for two identically priced houses.*

Attitudes and Appreciations Dimension

. . . *identify at least one contribution made to society by the carpenter's work.*

Career Information Dimension

. . . *use carpentry vocabulary terms properly in conversation.*

Educational Awareness Dimension

. . . *identify at least one source of knowledge about housing other than direct instruction.*

. . . *relate one's own mathematical skills to interpreting house designs.*

Subject Matter Concepts

- Mathematics
  - Measurement
    - Area
    - Precision in measuring
  - Figural
    - Scale drawing
- Language Arts
  - Reading
    - Making inferences
    - Generalizations
    - Visual imagination
  - Writing Skills
    - Descriptions
- Social Studies
  - Economics
    - Division of labor
    - Supply and demand
    - Goods and services

Preplanning Suggestions

Lifestyle subconcepts from kindergarten to fourth level
Magazines related to homes and home planning
Reasonably accurate estimate of the cost per square foot for various kinds of housing
Rulers, paper, and other materials to make scale drawings
Blueprints of actual houses

Relationships exist between desired lifestyles and career monetary rewards.

Lifestyle

Occupations have their own vocabularies.

Career Information

Career-oriented learning may take place in school or out of school.

Educational Awareness

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

To prepare pupils for studying and drawing floor plans, lead them to recall aspects of lifestyle treated at previous levels (e.g., moral principles, community and family perspectives). Relate those as well as monetary considerations to the kinds of houses people might choose to live in.

. . . *relate housing conditions to income.* PPO

Guide the discussion into housing as an important facet of lifestyle and the relationship between income and lifestyle. Allow, of course, for a variety of choices in housing--not everyone lives in an individual house, nor does everyone prefer to. This is a context in which the values and wants, as well as the expediencies, of people may be helpfully considered objectively.

. . . *use carpentry vocabulary terms properly in conversation.* PPO

. . . *identify at least one source of knowledge about housing other than direct instruction.* PPO

Magazines dealing with homes and gardening can be excellent sources for examples of house plans, furnishings, and settings. Have children (and other teachers) bring in a good supply that will allow for reasonable generalizations about relative costs of housing.

. . . *relate one's own mathematical skills to interpreting house designs.* PPO

Relationships exist between desired lifestyles and career monetary rewards.

Lifestyle

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

Besides developing vocabulary, incorporate the concepts of scale drawing, measurement numbers, and cost estimates into a study of floor plans for houses. Cost per square foot would probably be a sufficient means for estimating, but some children might want to pursue costs of building materials and labor in more detail.

> . . . *draw to scale two floor plans for two identically priced houses.* PPO
>
> . . . *identify at least one contribution made to society by the carpenter's work.* PPO

Have each child, or group of two or three, choose an income level within which to plan houses for two different lifestyles. Make drawings according to a chosen scale. Add written and/or pictorial descriptions to illustrate the imagined setting for each plan with respect to lifestyle considerations.

What relationships are there between sizes and numbers of rooms and lifestyle? What are the assumptions about numbers of inhabitants? What differences might there be in terms of basements, garages, fireplaces, yard space, type of siding, windows, interior decorating, furnishings, etc.? Help to show that carpenters, and other building tradesmen, provide services that directly affect people's lifestyles.

The REACT page for this activity will probably need purposeful direction to help children get into a study of various tasks and roles within the carpentry trade. Provide visual aids and printed materials to guide pupils along the way to further knowledgeability in this area.

KINDS OF CARPENTERS

Using a scale drawing is just one of the many skills a carpenter might need. In addition, there are different ways in which carpenters become specialists, depending on their situations. As you look up and write the answers to the following questions, you will discover some of these things.

1. How does the work of a roughing carpenter differ from the work of a finishing carpenter?

2. How does a beginning carpenter get started?

3. What is the difference between an apprentice carpenter and a journeyman?

4. What differences are there between the work of a carpenter in a large city and a carpenter in a small town?

5. How do contractors work with carpenters?

CONSTRUCTION PROJECT

Fifth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *relate carpentry skills to possible enhancement of one's own income or personal needs.*

Attitudes and Appreciations Dimension

. . . *discuss one's own attitude toward working on a carpentry project.*

. . . *discuss the possible employment of girls in carpentry.*

Career Information Dimension

. . . *describe certain physical skills required for carpentry work.*

. . . *identify a particular number of carpentry tools and their uses.*

Educational Awareness Dimension

. . . *cooperate with a classmate in constructing an object from wood.*

Subject Matter Concepts

- Mathematics
  - Measuring
    - Length and area
  - Geometry
    - Angles, perpendiculars

- Language Arts
  - Grammar and Usage
    - Labeling and classifying
  - Listening and Speaking
    - Giving and taking directions

Preplanning Suggestions

Determine how to obtain tools and supplies which will be necessary for a construction project (nails, planes, saws, etc.).

CONSTRUCTION PROJECT

Occupations require special personal characteristics.

Career Information

Occupations require the use of specific materials and equipment.

Career Information

Learning achievement depends upon effort and ability.

Educational Awareness

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

A great many tasks can be performed by men or women.

Attitudes and Appreciations

Provide wood, nails, screws, hammers, screwdrivers, planes, and other carpentry tools that are likely to be used for a simple construction project in school. Allow a substantial amount of time for pupils to practice with these materials before getting started on a particular task.

. . . *describe certain physical skills required for carpentry work.* PPO

. . . *identify a particular number of carpentry tools and their uses.* PPO

Discuss the planning necessary to get from the idea of a desired object to the finished product. Study examples of plans and specifications in relevant magazines, books, and manuals. Help pupils to consider a number of projects that would be appropriate for their skills and the available facilities--e.g., ring-toss game, cage for small animals, standing book shelf, Christmas tree stand, decorative plaque.

. . . *cooperate with a classmate in constructing an object from wood.* PPO

. . . *discuss one's own attitude toward working on a carpentry project.* PPO

. . . *discuss the possible employment of girls in carpentry.* PPO

Assemble needed materials and group children into pairs or threes to choose and work on a specific project. Encourage mutual help and awareness of one's own feelings about the

Relationships exist between desired lifestyles and career monetary rewards.

Lifestyle

Do girls tend to have attitudes different from boys? Do girls and boys differ in their ability to use the materials and tools? What progress do the pupils make in using the various tools?

> *. . . relate carpentry skills to possible enhancement of one's own income or personal needs.* PPO

Compare the costs of materials used with an estimated value of the finished product. (What factors might help to determine the value of the finished product?) The difference between original costs and the later value can be used to illustrate what labor has added to the value of raw materials. Help children to relate the value of labor to the ideas of salable skills, intrinsic satisfactions, and upkeep and improvement of one's own possessions.

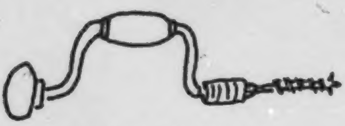
The REACT page concentrates on understanding the names and uses of common tools of carpentry. In one exercise, the pupil is asked to identify various tools and their uses. In the other, tools are to be classified with respect to a pupil's opinion about his own present skills with them. An open-ended question about "other uses" for a hammer is included to induce creative thinking. This approach can obviously be directed toward other tools as well.

LS/Level 5/2

"What's in the Toolbox?"

WHAT'S IN THE TOOLBOX?

Use the definitions below to help you fit the names of the carpenter's tools into the puzzle.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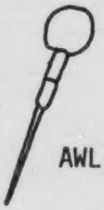
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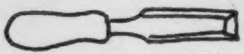
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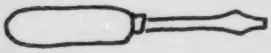
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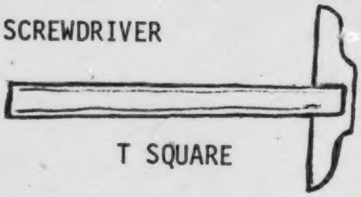
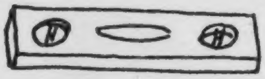
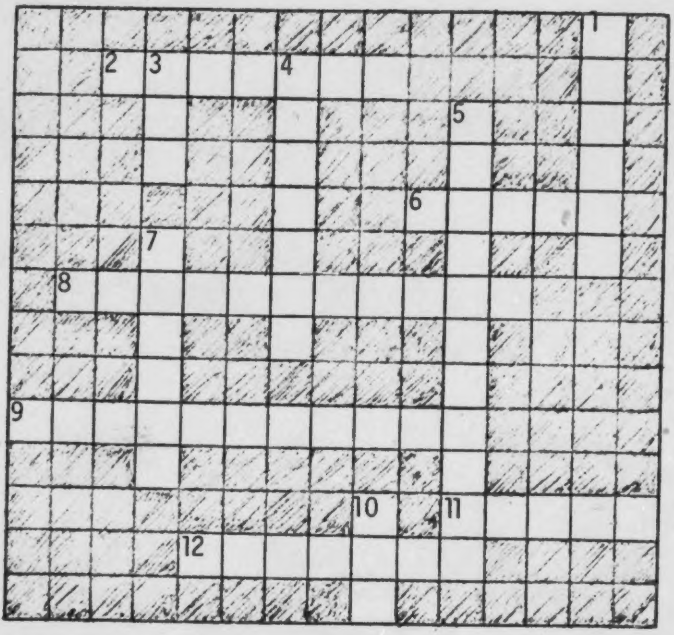
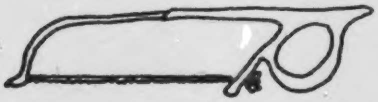
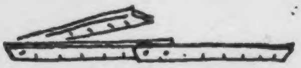
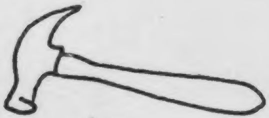

T SQUARE

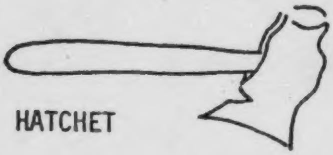

LEVEL




HACKSAW


FOLDING RULE


HAMMER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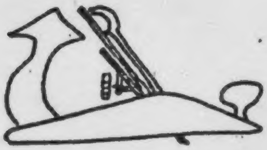
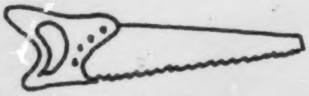

PLANE


SAW

ACROSS

2. for chopping wood
6. for smoothing a surface
8. for drilling holes
9. for turning screws
11. for locating a horizontal line
12. for making right angles or parallel lines

DOWN

1. for shaping or chipping wood
3. for punching small holes
4. for cutting metals
5. for measuring lengths
7. for driving nails
10. for cutting wood

In the columns below, list the names of carpenters' tools according to how well you think you are able to use them.

GOOD	FAIR	POOR

Besides driving a nail into a piece of wood, or pulling the nail out, what other uses can you think of for a hammer?

THEN AND NOW

Fifth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *compare one's own family dwelling with an example from at least one period in U. S. history.*

Attitudes and Appreciations Dimension

. . . *identify a particular contribution made to society in past history by carpenters.*

Career Information Dimension

. . . *identify a given number of carpentry tools in a particular period of U. S. history.*

Educational Awareness Dimension

. . . *describe the preparation required for carpentry during a particular period of U. S. history.*

Subject Matter Concepts

- Social Studies
  - History
    - Relation of geography and history
    - U. S. history
    - Societies have changed.
    - American values
  - Geography
    - Latin America
    - Needs differ with climate and resources.
  - Sociology-Anthropology
    - Housing
    - Similar basic needs
    - Inherited cultures influence present.
    - Community reflects values.
- Language Arts
  - Reading
    - Making inferences
    - Finding information
  - Writing Skills
    - Completing open-ended stories
    - Changing points of view

Preplanning Suggestions

Visuals of American housing from early times to the present
Visuals of old-style tools

THEN AND NOW

Relationships exist between desired lifestyles and career monetary rewards.

Lifestyle

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

Career-oriented learning may take place in school or out of school.

Educational Awareness

Occupations require the use of specific materials and equipment.

Career Information

Use films, filmstrips, or printed materials to supply information on housing conditions during earlier periods in U. S. history--e.g., colonial times, antebellum South, frontier life.

. . . compare one's own family dwelling with an example from at least one period in U. S. history. PPO

Help pupils relate lifestyle, particularly in terms of economic situations, to the types of housing people used in previous times. How did availability of resources affect choices? What differences are there in terms of furnishings, conveniences, building materials, etc.?

. . . identify a particular contribution made to society in past history by carpenters. PPO

. . . describe the preparation required for carpentry during a particular period in U. S. history. PPO

. . . identify a given number of carpentry tools in a particular period of U. S. history. PPO

Further study may be directed into the acquisition and use of carpentry skills in earlier times. How did a person learn to do the things that carpenters did? How were carpentry skills used for personal needs and to help others? What carpentry tools were used in the past? How do these kinds of ideas compare to present-day carpentry?

The historical perspective could be a likely context for a study of unions and how they have affected workers' lifestyles as well as working conditions.

The REACT page directs the study of housing and lifestyle to other places in the present world. Help pupils review various considerations of lifestyle for these comparisons. Be sure that a reasonable amount of informational material is available and that the terms on the REACT page are clearly understood.

LS/Level 5/3

"Here and There"

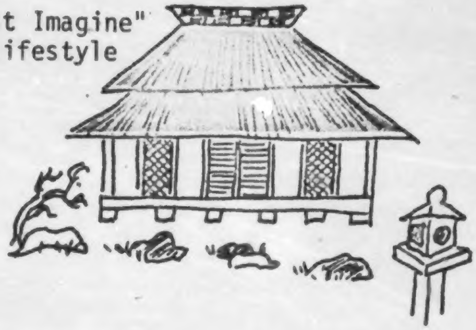
HERE AND THERE

Use the chart below to compare your own home with the home of a family in another part of the United States or elsewhere in the world.

First, decide where the other home is and then find out as much as you can to help you fill in the blanks on the chart. You may choose to add more items to compare if you like.

	MY HOME	A HOME IN ____________
building materials		
number of rooms		
size of lot		
kitchen appliances		
other appliances		
plumbing fixtures		
floor coverings		

On the other side of this paper are some "Just Imagine" questions that can help you to project your lifestyle into other times and places.



If you were transported into the year 2095, what different ways of living would you expect to find?

What things would you most want to take along? Why?

- -

If you were moving to a country in South America, which one would you choose? Why?

Show where that country is located.

What things would you most want to take along? Why?

- -

If you were moving to a country in Africa, which one would you choose? Why?

Show where that country is located.

What things would you most want to take along? Why?

CARPENTER ROLES

Fifth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *describe at least two possible lifestyles that a carpenter might choose or need to follow.*

Attitudes and Appreciations Dimension

. . . *identify at least two different carpentry tasks requiring regular hours of work.*

Career Information Dimension

. . . *describe the unique features of a given carpentry work setting.*

Educational Awareness Dimension

. . . *cite a specific work experience of a carpenter as an example of continuing learning.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Playing roles with dialogue
    - Interviewing
    - Listening for comprehension
  - Writing Skills
    - Points of view
    - Writing descriptions
  - Reading
    - Note-taking

Preplanning Suggestions

Contact or find carpenters or construction personnel to discuss income.

CARPENTER ROLES

Relationships exist between desired lifestyles and career monetary rewards.

Lifestyle

Learning is a lifelong process.

Educational Awareness

Most occupations include common expectations, such as punctuality, dependability, and avoidance of excessive absence.

Attitudes and Appreciations

Occupations have their own work settings.

Career Information

Direct pupils in seeking out data concerning varying income expectations for different kinds of carpenters in different kinds of working situations. This information plus that of other aspects of carpenters' work can serve as bases for imagining and dramatizing various events in the lives of carpenters.

. . . *describe at least two possible lifestyles that a carpenter might choose or need to follow.* PPO

. . . *cite a specific work experience of a carpenter as an example of continuing learning.* PPO

. . . *identify at least two different carpentry tasks requiring regular hours of work.* PPO

. . . *describe the unique features of a given carpentry setting.* PPO

Provide opportunity for pupils to form small groups to invent, prepare, and produce skits illustrating possible events in the lives of carpenters--with emphasis on lifestyle considerations. Some likely topics could be:

an interview of a carpenter applying for a job

an evening at home after a day's work

experiences of an apprentice in colonial times

a lunch time discussion among carpenters at a construction site a meeting of a local carpenters' union

an experienced carpenter helping a newly-hired worker get acquainted

Follow up each skit with a discussion or written activity about the content presented. Taking notes during the skits and discussions would be helpful. Encourage personal opinions regarding the implications for lifestyle.

The REACT page offers pupils a chance to summarize their own perspectives in terms of their own self concepts and their present knowledge of carpentry. Review the ideas of interests, skills, and values individually and as interrelated aspects of a person's lifestyle.

LS/Level 5/4

"Personal Thoughts"

PERSONAL THOUGHTS

Suppose you have decided to give some careful thought to the idea of becoming a carpenter. Fill in the chart below to help identify your strengths and weaknesses, what you like and dislike, and how you feel about some of the things you have learned about carpentry.

Things About Myself	How They Would Help	How They Might Not Help
My Interests		
My Skills		
My Values		

Because of these comparisons, I think that my chances of becoming a successful carpenter are:

RELATED MATERIALS

The Boys' Book of Tools (Book) Raymond Yates. Harper & Row, 49 East 33rd Street, New York, New York 10016, 1971.

Children of Many Lands (Sound Filmstrip) Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, Illinois 60614, 1970.

Come to Work With Us in House Construction (Book) Jean and Ned Wilkinson. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1971.

Different Life Styles (Sound Filmstrip) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1972.

Homes Around the World (Sound Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

How to Get a Job and Keep It (Textbook) Steck-Vaughn, P. O. Box 2028, Vaughn Building, Austin, Texas 78767, 1970.

I Can Do It (Worktexts and Activity Sheets) George A. Pflaum, 38 West Fifth Street, Dayton, Ohio 45402, 1971.

Learning to Live With Others (Sound Filmstrip) Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, Illinois 60614, 1971.

The Lumberyard (Film, Color or B/W, 11-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1972.

Pioneer Artisans (Sound Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Shelter Series (Filmstrips) Encyclopaedia Britannica Educational Films, Inc., 425 North Michigan Avenue, Chicago, Illinois 60611, 1970.

CARPENTERS

Carpenters, the largest group of building trades workers, are employed in almost every type of construction activity. They erect the wood framework in buildings, including subflooring, sheathing, partitions, floor joists, studding, and rafters. When the building is ready for trimming, they install molding, wood paneling, cabinets, window sash, doorframes, doors, and hardware, as well as build stairs and lay floors. Carpenters, when doing finish work, must concern themselves with the appearance, as well as the structural accuracy, of the work.

Carpenters also install heavy timbers used to build docks, railroad trestles, and similar structures. They build the forms needed to pour concrete decks, columns, piers, and retaining walls used in the construction of bridges, buildings, and other structures.

Some carpenters, more commonly in large cities, specialize in a particular type of carpentry. In small communities, they ordinarily do all types. In rural areas, carpenters may also do the work of other craftsmen, e.g., painting, glazing, or roofing.

Carpenters in construction are employed mainly by contractors and homebuilders at the construction site. Some alternate between wage employment and self-employment on small jobs. Some work for government agencies or nonconstruction firms. Many do maintenance work in factories, hotels, etc. Others are employed in shipbuilding, mining, and the production of display materials.

Apprenticeship applicants are generally required to be from 17 through 27 years of age; a high school education or its equivalent is desirable. Good physical condition, a good sense of balance, and lack of fear of working on high structures are important assets. Aptitudes should include manual dexterity and the ability to solve arithmetic problems quickly and accurately.

The apprenticeship program usually takes four years and includes on-the-job training plus related classroom instruction. Hourly wage rates start at about fifty percent of the journeyman rate and increase by about five percent in each six-month period until eighty-five to ninety percent is reached during the last period of apprenticeship.

Carpenters may advance to carpenter foreman or general construction foreman. The proportion of self-employed is higher among carpenters than most other skilled building trades. Some self-employed carpenters are able to become contractors and employ other journeymen.

There were nearly 870,000 carpenters in 1968, and employment opportunities are expected to increase moderately during the 1970's. The large rise in construction plus increasing need for maintenance work should result in a growing demand for carpenters. New types of construction materials, tools, and techniques will also affect employment.

As in other building trades, the work of the carpenter is active and sometimes strenuous, but exceptional physical strength is not required. However, prolonged standing, as well as climbing and squatting, is often necessary. Carpenters risk injury from slips or falls, from contact with sharp or rough materials, and from the use of sharp tools and power equipment.

A large proportion of carpenters are members of the United Brotherhood of Carpenters and Joiners of America.

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 367-370.

GROWING PAINS AND PLEASURES

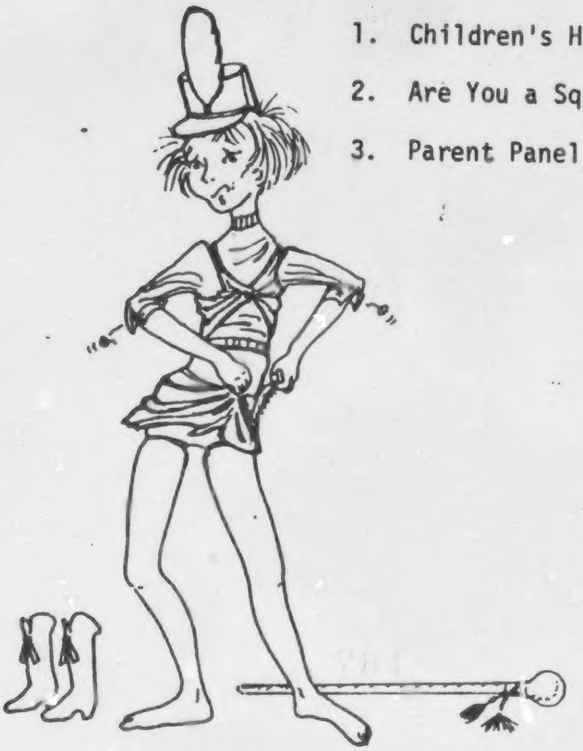
FIFTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS: Interests and abilities mature and change as well as one's physical being.

OCCUPATIONAL FOCUS: Pediatrician

ACTIVITIES
IN THIS INFUSION STRATEGY

1. Children's Health
2. Are You a Square?
3. Parent Panel



Teacher Goals

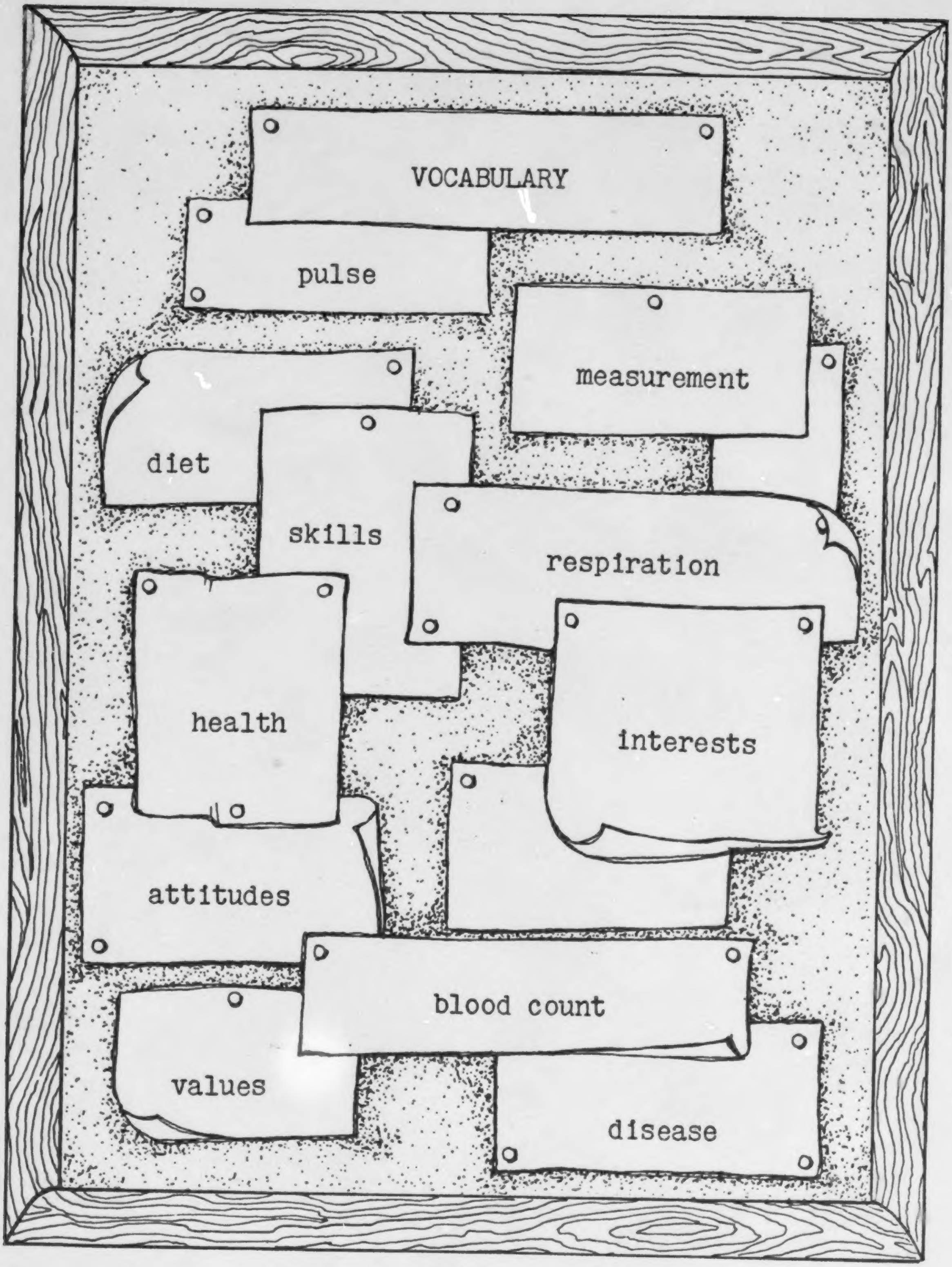
Teacher goals of this strategy combine a Self-Development Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Pediatrician. In this perspective the teacher's goals are to:

Interest pupils in describing their interests, abilities, and physical characteristics at different age levels.

Provide experiences for measuring and discussing aspects of physical, intellectual, and emotional growth.

Invite other professionals or parents to share the study of child development with the pupils.

Help pupils to anticipate personal growth and changes in the near future.


VOCABULARY
pulse
measurement
diet
skills
respiration
health
interests
attitudes
blood count
values
disease

CHILDREN'S HEALTH

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *interpret measurements of one's changing height and weight as shown in school records.*

Attitudes and Appreciations Dimension

. . . *identify at least two contributions made to one's own health by a doctor or school health worker.*

. . . *discuss the demands of a pediatrician's work upon his time schedule.*

Career Information Dimension

. . . *describe personal characteristics that are essential for a person dealing with children's health.*

Educational Awareness Dimension

. . . *identify academic knowledge and skills used by a pediatrician or school health worker.*

. . . *name at least one fact about one's own health learned at school.*

Subject Matter Concepts

- Science
  - Biology
    - Human body functions
    - Systems and organs of the body
  - Scientific Method
    - Comparisons made by measurements
    - Special instruments help us observe.
    - Use of senses to gather data

- Social Studies
  - Sociology-Anthropology
    - Individual characteristics
    - Dependence upon others

Preplanning Suggestions

Pupils' school health records
Resource person who keeps pupil records
Graph paper
Materials for class chart of childhood diseases
Visuals of food groups (available from nurses or health books)
Magazines and newspapers for pictures to use in scrapbooks

CHILDREN'S HEALTH

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Career-oriented learning may take place in school or out of school.

Educational Awareness

Interests and abilities mature and change as well as one's physical being.

Self-Development

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

The pediatrician is primarily concerned with the health and growth of young children. This activity seeks to help pupils recall some of the experiences they have had with doctors and other medical personnel who provided them with health services. The emphasis is on both the nature of the services and the people who offer them.

. . . *identify academic knowledge and skills used by a pediatrician or school health worker.* PPO

. . . *name at least one fact about one's own health learned at school.* PPO

. . . *interpret measurements of one's changing height and weight as shown in school records.* PPO

. . . *identify at least two contributions made to one's own health by a doctor or school health worker.* PPO

Secure copies of pupils' school health records and use them as the basis for a discussion about growth and health. Call attention to the kinds of information recorded and encourage the recall of specific occasions when health examinations (height, weight, sight, hearing, etc.) were done at school. What were the purposes of those examinations? Did any children have a health condition improved as a result of the screening checks? Invite the school nurse, or whoever else might be in charge of these records, to visit the classroom and help children to understand and interpret their records.

The pupils may want to make individual graphs of their own height and weight histories. A total class activity

Occupations require special personal characteristics.

Career Information

Most occupations include common expectations, such as punctuality, dependability, and avoidance of excessive absence.

Attitudes and Appreciations

could involve a chart of the incidence of "regular" childhood diseases among members of the class.

> . . . *describe personal characteristics that are essential for a person dealing with children's health.* PPO
>
> . . . *discuss the demands of a pediatrician's work upon his time schedule.* PPO

Use the context of their health data to lead children into a consideration of the kinds of people who would choose to work in the area of children's health. What physical skills and endurance would a pediatrician need? How can he keep track of, and treat effectively, the many different personalities he deals with? What scientific knowledge must he have? What other kinds of knowledge?

The REACT page focuses attention on a common health consideration--diet. The pupil is directed to keep track of his food and drink intake for a week and to comment on the choices, lack of choices, and feelings which relate to one's diet.

Children may need to be instructed in the basic food groups as identified on the back of the REACT page. This may be done via discussion, by lists on the board, or whatever other means the teacher may choose. Such grouping may be enlarged into another activity by collecting pictures of foods from magazines and newspapers for individual scrapbooks or for a bulletin board.

SD/Level 5/1

"You Are What You Eat"

YOU ARE WHAT YOU EAT

Your health is always affected by what you eat--sometimes you feel better, sometimes not so good. How you grow and how you look depends upon what you eat and drink.

My Diet

Date________________

Breakfast

Lunch

Supper

Snacks

Keep a record of your diet for at least a full week and see how you are feeding yourself. Make a form like the one on this page for each day and keep track of your ingestion. (That means what you put into your stomach. If your stomach can handle it, you have digestion. If not, you have indigestion!)

On the other side of this paper are some questions to think about and answer during your diet recording.

(over)

Pediatricians recommend a balanced diet that includes all basic groups of foods. Tell what you ate from each group during your week of keeping track of your diet.

DAIRY PRODUCTS

BREADS AND CEREALS

VEGETABLES AND FRUITS

MEATS AND POULTRY

Besides milk and water, what other beverages did you drink?

What foods and drinks were you able to choose for yourself?

Which food did you dislike most?

Which food did you enjoy most?

ARE YOU A SQUARE?

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *construct a graph showing the height-reach ratio of all members of the class.*

Attitudes and Appreciations Dimension

. . . *explain how nurses and lab technicians assist a pediatrician.*

Career Information Dimension

. . . *identify at least two measuring devices used by a pediatrician.*

Educational Awareness Dimension

. . . *apply one's own measurement abilities to particular dimensions of one's own body.*

Subject Matter Concepts

- Science
  - Biology
    - Living things change as they grow.
- Mathematics
  - Figural
    - Tables and graphs
  - Measurement
    - Precision to nearest unit
    - Fractional parts of units
- Social Studies
  - Sociology-Anthropology
    - Individual characteristics

Preplanning Suggestions

Tape measures for measuring height and "reach"
Large sheet of graph paper
Visuals of a pediatrician's tools and equipment

ARE YOU A SQUARE?

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Interests and abilities mature and change as well as one's physical being.

Self-Development

An interesting relationship between two body measurements can be shown by comparing one's height and one's reach. The "reach" is the distance from the tip of one middle finger to the tip of the other middle finger when both arms are fully extended to the sides.

> *. . . apply one's own measurement abilities to particular dimensions of one's own body.*
> PPO

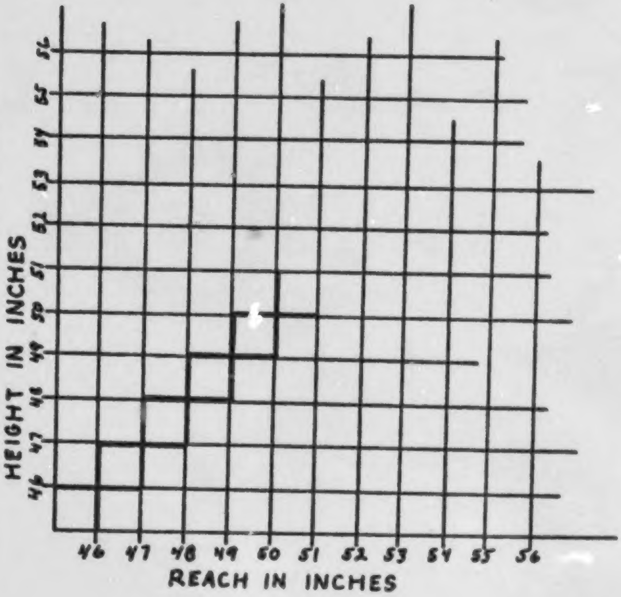
Set up at least one measuring station for children to measure their heights and one to measure their reaches. The simplest arrangements could be a vertical tape measure of sufficient length attached to a wall, bulletin board, door frame, etc., for heights and a horizontal tape measure attached elsewhere at a position reasonably close to the average height of the children's shoulders for reaches. The teacher may choose to use metric measure for this activity rather than, or in addition to, English units.

Show children how to measure and record each dimension, then allow them to do so until each member of the class has been measured.

NAME	HEIGHT	REACH

> *. . . construct a graph showing the height-reach ratio of all members of the class.* PPO

Provide copies of a blank grid or sheets of graph paper for children to make graphs of the data they have collected. Demonstrate on the chalkboard or on an overhead transparency how to set up the graph and plot each ratio. Notation may be made by tally marks, children's names, or other symbols.



A ratio of height equal to reach represents a "square" (length=width) and will be plotted somewhere in the diagonal set of boxes starting at the lower left corner of the graph. (These "square" boxes are shown above in heavy outline for illustration.) "Tall rectangles" (length > width) show above and to the left of the "squares" diagonal; thus, 50 inches tall with a 48-inch reach would be in the box where height-50 and reach-48 cross. "Short rectangles" (length < width) show below and to the right of the "squares" diagonal; thus, 50 inches tall with a 51-inch reach would be in the box where height-50 and reach-51 cross.

Discuss the data shown by the graph being careful not to connote that it is "better" or "worse" to have any of the ratios. Children at this age are very conscious of body growth and physical appearance, and those who happen to be excessive or lacking in height or some other dimension may

Occupations require the use of specific materials and equipment.

Career Information

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

be sensitive about their appearance. The use of height-reach ratios, which will usually cluster on and near the "squares" diagonal, can be a helpful way to illustrate a way of being "normal."

. . . *identify at least two measuring devices used by a pediatrician.* PPO

. . . *explain how nurses and lab technicians assist a pediatrician.* PPO

Meanwhile, discuss physical measurements as an essential part of a pediatrician's records. Besides height and weight, what other things about a patient does he measure? Help children identify such quantitative ideas as pulse, blood count, respiration rate, temperature, blood pressure, etc. What instruments are used for each of these measurements? How does a pediatrician depend upon laboratory technicians and nurses?

The REACT page directs the pupil to cooperate with a classmate to measure some other dimensions of their bodies. This can be related to the early development of standard units and can also provide a convenient means for estimating sizes of things in everyday life. One's own span, for example, is a handy "ruler" that is always available for estimating relatively short lengths.

SD/Level 5/2

"Portable Rulers"

PORTABLE RULERS

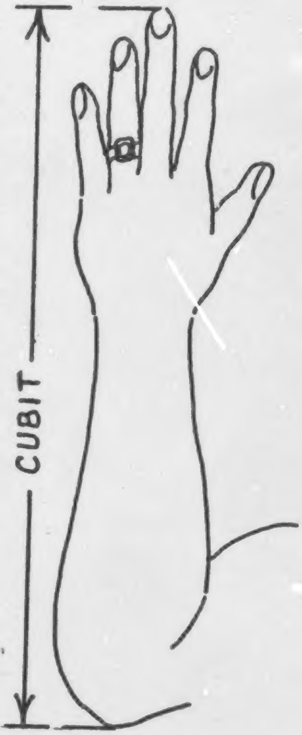
You are always carrying around several very handy measuring devices. One of these is your hand. If you stretch your thumb and fingers as wide apart as possible, the distance from the tip of your thumb to the tip of your little finger is your SPAN.

How long is your span in inches? __________

How long is your span in centimeters? __________

Find the lengths of these other body rulers:

Bend your arm at the elbow and extend you hand straight up. The distance from the outside point of your elbow to the tip of your middle finger is your CUBIT.

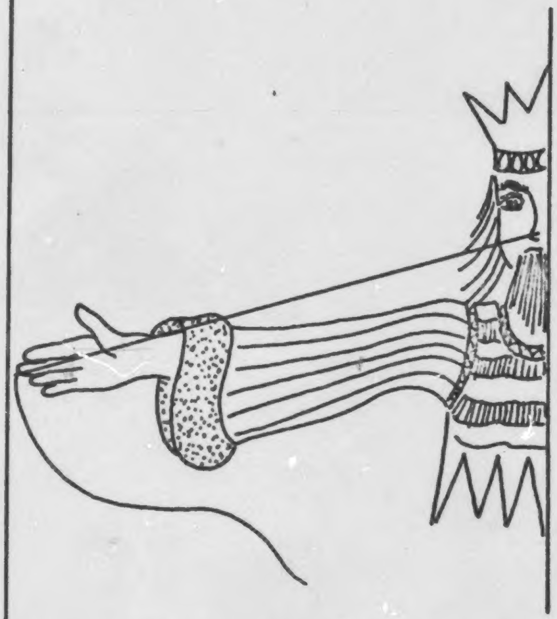


How long is your cubit in inches? __________

How long is your cubit in centimeters? __________

(Back in the old days a cubit was considered to be 18 inches.)

(over)



The King of England stretched his right arm out to the side and had the distance from the tip of his nose to the tip of his middle finger measured. This became the YARD.

How many inches long is your yard? ________

How many centimeters long is your yard? ________

The foot, of course, comes from the length of a man's foot.

How many inches long is your foot? ________

How many centimeters? ________

One Sunday morning sixteen English gentlemen lined up after church placing their right feet, heel to toe, in one long line. This became the ROD.

What is the longest rod you could make using the children in your class? ________

What is the shortest rod you could make using the children in your class? ________

What objects in the classroom could you measure easily with your span?

With your foot?

With your cubit?

How many of your spans equal one of your cubits? ________

How many of your feet equal one of your yards? ________

PARENT PANEL

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *recall a hobby, or other activity, in which he is no longer interested.*

. . . *propose possible changes in one's own abilities and interests before the end of sixth grade.*

Attitudes and Appreciations Dimension

. . . *report on one's own responsibilities for at least one task at home.*

Educational Awareness Dimension

. . . *name at least two skills learned before entering school.*

. . . *compare the contents of at least two textbooks for one's own grade level with related texts for sixth grade.*

Subject Matter Concepts

Language Arts
  Listening and Speaking
    Discussion skills

Science
  Scientific Method
    Similarities and differences
  Biology
    Living things change as they grow.

Preplanning Suggestions

Parents as resource people in a classroom meeting with children

PARENT PANEL

Work involves the acceptance of responsibility for a task.

Attitudes and Appreciations

Learning is a lifelong process.

Educational Awareness

Interests and abilities mature and change as well as one's physical being.

Self-Development

This activity seeks to focus attention on preschool events and conditions experienced by members of the class.

Invite several parents to take part in a panel discussion about their recollections of the preschool life of their children. (This can involve more than one panel on more than one day, if feasible.) In addition to health considerations, the content of the discussion should involve topics such as favorite games, playmates, television and other amusements, travels, tastes for foods, learning of certain physical skills, helping with chores, etc.

. . . *report on one's own responsibilities for at least one task at home.* PPO

. . . *name at least two skills learned before entering school.* PPO

. . . *recall a hobby, or other activity, in which he is no longer interested.* PPO

Encourage pupil discussion during and after the panel. Aim for appreciation of changes in attitudes, values, and physical growth. Keep the perspective as positive as possible--the coming and going of different interests and values, etc., is a normal part of maturation and learning.

This interchange of ideas about personal histories and the identification of different types of learnings and growth can help an individual to "stop" and appreciate just how much he has accomplished in his first ten years on this planet. Pupils should also be reminded that all of these factors of

Interests and abilities mature and change as well as one's physical being.

Self-Development

Learning is a lifelong process.

Educational Awareness

their total growth are rightful concerns of pediatricians and other adults who are interested in their welfare.

. . . propose possible changes in one's own abilities and interests before the end of sixth grade. PPO

. . . compare the contents of at least two textbooks for one's own grade level with related texts for sixth grade. PPO

The REACT page concentrates on the self-development subconcept of changing interests. Pupils are directed to anticipate how they may expect to be different by the time they enter junior high school. This should include social, intellectual, and valuing considerations as well as physical growth.

SD/Level 5/3

"Looking Ahead"

LOOKING AHEAD

JUNIOR HIGH

In another year or so you will be heading into junior high.

How might your feelings be different by then?

What new things might you be able to do?

Let's take a look ahead!

Borrow a sixth grade arithmetic book and compare the table of contents with your present arithmetic book. What new mathematical ideas and skills are coming your way next year?

Make the same kind of comparisons with science and social studies books.

WHAT'S NEW IN SCIENCE?	WHAT'S NEW IN SOCIAL STUDIES?

In what school subjects will you have to work hardest next year?	In what playground games do you expect to do better?

What changes might take place in your viewing of television?

Do you expect to have more friends a year from now? If not, why not?

If yes, what will you do to make more friends?

RELATED MATERIALS

About Jerry and Jimmy and the Pharmacist (Book) F. Thompson. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1964.

Doctor John (Book) F. Thompson. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1958.

For Junior Doctors Only (Book) Helen Jill Fletcher. The Bobbs-Merrill Company, Inc., 4300 West 62nd Street, Indianapolis, Indiana 46206, 1961.

Going to the Doctor, Dentist, and Hospital (Sound Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1973.

Here I Am (Textbook) George A. Pflaum, Publisher, 38 West Fifth Street, Dayton, Ohio 45403, 1971.

I Want to Be a Doctor (Book) F. Eckart. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1958.

Jill's Checkup (Book) R. Jubelier. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1957.

Learning to Live with Others (Sound Filmstrip) Society for Visual Education, Inc., 1345 Diversey Parkway, Chicago, Illinois, 60614, 1971.

Man's Battle Against Disease (Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Young Scientist and the Doctor (Book) George Barr. McGraw-Hill Book Company, 330 West 42nd Street, New York, New York 10036, 1969.

PEDIATRICIANS

Pediatrics deals with the health and welfare of infants and children. More than in any other medical speciality, pediatrics needs to attend to the preventive and maintenance aspects of medical care. With an ultimate goal of optimum development toward adulthood, the pediatrician must view his patient as someone passing through stages of physical, social, and emotional development. These factors also influence educational growth. Thus, the pediatrician must know ranges of deviations within limits of normality as they pertain to various age levels.

The age periods of infancy and childhood are divided into the Newborn Period (the first four weeks of life), the Period of Infancy (to about age two), the Toddler and Preschool Period (to about age five), and the School Ages. Each of these stages is marked by particular expectations in physical, emotional, and mental growth. Awareness of these normal patterns of growth is a basic tool of the pediatrician.

Before the birth of the child, the pediatrician may consult with the obstetrician in order to prevent possibility of any illness in the mother from affecting the infant. He may also consider possible blood incompatibilities between the infant and the mother. Sometimes the pediatrician chooses to be present when the baby is born or to be called immediately thereafter--particularly in cases when an illness of the mother may be a threat to the baby's health. Injuries at birth are also a concern for the pediatrician.

During the first six months of the infant's life, routine visits to the pediatrician are made about every four weeks. Diet, growth progress, and general development are discussed and observed during these visits. The program of immunization is also begun.

Walking and talking and other habits and behaviors are developed between the ages of one and six years. Through these years, pediatricians prefer to examine their patients at intervals of between three and four months. These examinations include measurements of growth and observation of activities. Dietary considerations are especially important through these years, and the immunization program should be reviewed every two or three years.

The school years bring on new environments and possible social and emotional complications. Exposure to other children is also a condition which may induce colds and other infections. On the other hand, many schools provide screening examinations for eyesight, hearing, and/or other health aspects which can offer assistance to the pediatrician in discovering conditions that might need to be looked at more specifically.

Beyond the four years of regular medical school training, a pediatrician must have at least three additional years of training--one year of interning and two as a resident physician in an approved pediatric unit. After the residency, two more years are required in practice, research, or teaching before the examination for certification may be taken. The successful applicant, upon passing the examination, is granted certification by the American Board of Pediatrics.

Pediatrically-trained physicians are needed especially in private practice. However, there are opportunities for many in the areas of academic pediatrics, public health, and positions in medical administration.

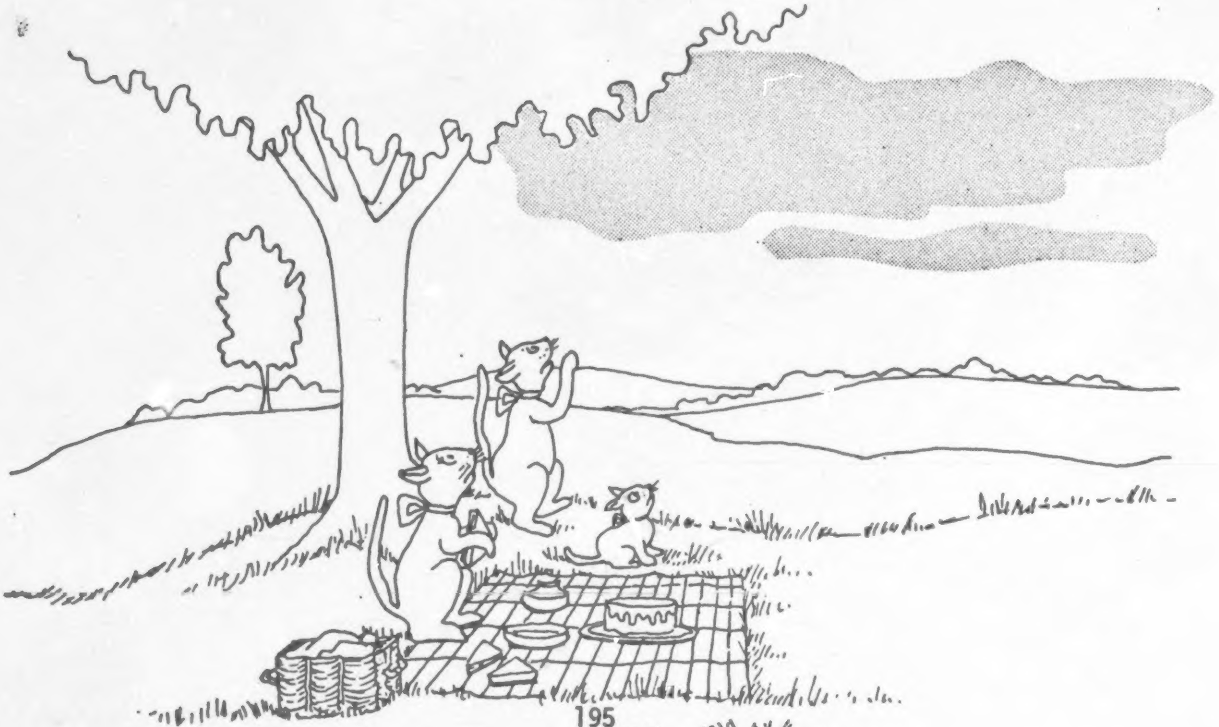
CHANGING PLACES

FIFTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS:	Changes in an individual influence his environment and changes in environment influence him.
OCCUPATIONAL FOCUS:	Travel Agent

ACTIVITIES
IN THIS INFUSION STRATEGY

1. Wither Thou Goest
2. Cook's Tours
3. Pathfinding Practice



Teacher Goals

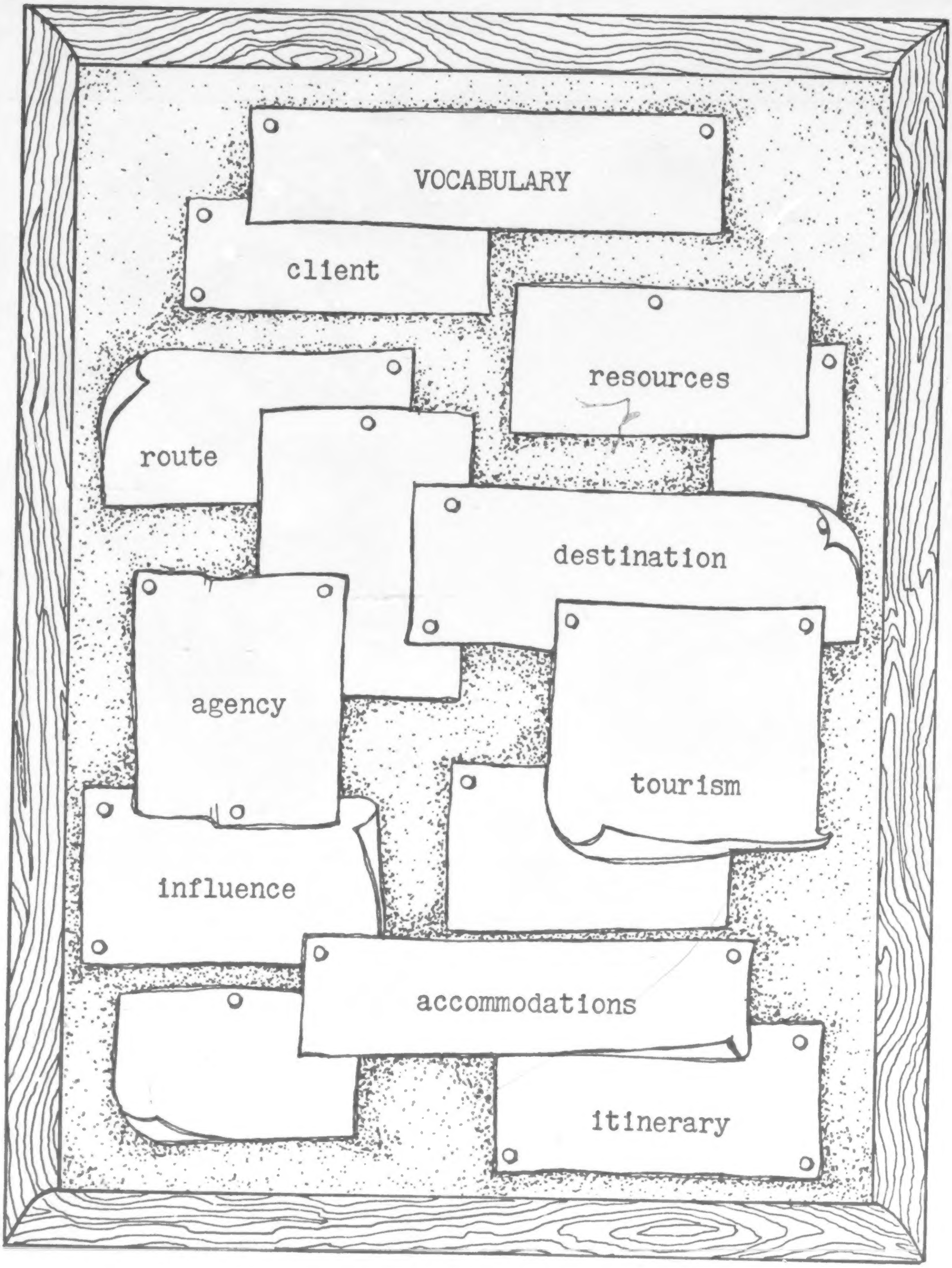
Teacher goals of this strategy combine a Self-Development Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Travel Agent. In this perspective the teacher's goals are to:

Provide opportunities to explore work settings and manpower needs that have been altered by technology.

Expand appreciation of the effects of environment upon feelings and behavior.

Structure experiences for pupils to apply intellectual and social skills to the work of travel agents.

Enlarge pupil awareness of the role of the travel agent in the total economy.


VOCABULARY
client
resources
route
destination
agency
tourism
influence
accommodations
itinerary

WHITHER THOU GOEST

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *describe how traveling can be affected by the time of year.*

. . . *explain how being in different places can affect one's feelings.*

Attitudes and Appreciations Dimension

. . . *relate the services of a travel agent to particular people's needs.*

Career Information Dimension

. . . *use words related to tourism properly in conversation and writing.*

Educational Awareness Dimension

. . . *identify academic knowledge and skills needed by a travel agent.*

. . . *explain how modern technology has made travel more accessible.*

Subject Matter Concepts

- Social Studies
  - Geography
    - Global locations
    - Climate and topography
    - Interaction between people and environments
  - Economics
    - Interdependence of regions
    - Using natural resources
    - Different uses of environments
  - Sociology-Anthropology
    - Lifestyles differ with time and place.
    - Technology produces changes in ways of living.

Preplanning Suggestions

A collection of travel folders
Maps and globes

WHITHER THOU GOEST

This activity explores the psychological, sociological, and economic bases upon which tourism depends. Where do people like to go? Why, when, and how? Have the children help collect a good supply of travel folders dealing with as many different places and modes of travel as possible.

Occupations have their own vocabularies.

Career Information

. . . *use words related to tourism properly in conversation and writing.* PPO

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

. . . *identify academic knowledge and skills needed by a travel agent.* PPO

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

. . . *relate the services of a travel agent to particular people's needs.* PPO

Changes in an individual influence his environment and changes in environment influence him.

Self-Development

. . . *describe how traveling can be affected by the time of year.* PPO

Discuss the contents of the travel folders. What places in the world are represented? What means of transportation are offered? How do costs differ according to transportation, distance, or destinations? What provisions are made for living accommodations? How do the folders appeal to what people want to see and do? How are the times offered related to the calendar and climate? Identify climate, scenery, and native features as natural resources for tourism.

Use these types of questions to draw inferences about the work of the travel agent. Consider the detailed knowledge and reference skills he must have. He needs to be able to contact and deal with workers in a wide variety of locations and businesses.

Changes in an individual influence his environment and changes in environment influence him.

Self-Development

Learning is a lifelong process.

Educational Awareness

His clients most likely involve greatly differing personalities, economic conditions, and tastes and values. Each of these cases must be treated individually and in a manner that will encourage repeat business later on.

. . . *explain how being in different places can affect one's feelings.* PPO

. . . *explain how modern technology has made travel more accessible.* PPO

The "why" of traveling, of course, is the foundation of the travel business. Have children write down a list of places they have been and/or would like to go together with their reasons for going. What feelings did they have about being in those places? Did the traveling itself have any special significance? Could they have made the trip without a car, bus, train, airplane, etc.?

Enlarge on these thoughts to consider why people would want to go to Egypt, Tahiti, Alaska, New Orleans, etc. What does sightseeing "do" for people? Does knowing and learning about history and geography make any difference? When traveling overseas, how would someone choose between going by ship or by airplane? If modern transportation were not available, what traveling could and would people do?

The REACT page directs pupils to make an original travel folder. This may relate directly to geography study or can stand by itself. Help review the normal contents of travel folders so that such items as costs, agency name and address, specific accommodations, etc. are clearly in mind.

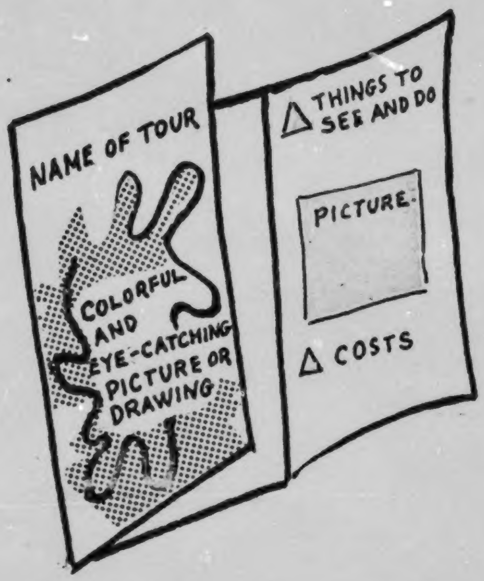
SD/Level 5/4

"Travel Folder"

TRAVEL FOLDER

Pretend you are working for a travel agency.

Your job is to make a travel folder to advertise a new tour.


NAME OF TOUR
COLORFUL AND EYE-CATCHING PICTURE OR DRAWING
THINGS TO SEE AND DO
PICTURE
COSTS

Choose a city, state, country, or region of the world as the subject for an imaginary tour.

Then design a travel folder to describe the place and the services that your agency offers to people who want to go there.

Look again at real travel folders to get some ideas about what kind of information to use. What do they tell about costs? The name and address of the agency? Kinds of transporation? Kinds of accommodations? Things to see and do? Be sure you have these kinds of information in your folder.

Pictures from old magazines could be used to dress up your folder or you could make some drawings yourself.

Be sure to put in a good sales talk for your customers. Make them want to take the trip!

COOK'S TOURS

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *identify language and social skills required to plan and direct simulated tours.*

Attitudes and Appreciations Dimension

. . . *discuss the mutual expectations of a travel guide and a traveler on a tour.*

Career Information Dimension

. . . *describe how certain physical, social, and intellectual skills are needed by a travel guide.*

Subject Matter Concepts

- Language Arts
    - Listening and Speaking
        - Playing roles
        - Formal and informal language
        - Giving and taking directions
        - Stress and feeling in speech
- Social Studies
    - Political Science
        - Building rules
        - Rules for interaction

Preplanning Suggestions

Maps of the school, neighborhood, and community
Resource material to study about tour guides--films, books, etc.

COOK'S TOURS

This activity applies the idea of guided tours directly to the school building and the immediate area. Children become travel agents and guides using the school facilities as their area of operation.

Interest may be aroused by telling of Thomas Cook, an Englishman, who apparently started the idea of guided tours in 1941. He arranged a special train from Leicester to Loughborough where his passengers attended a temperance meeting. In 1951, he helped attendance at the Great Exhibition. Later, Cook's Tours involved riding camels to see the pyramids, sailing on the Rhine to view castles, or riding through Paris in carriages. Improved transportation expanded travel--both informal and formal. In 1931, the American Society of Travel Agents and the National Association of Travel Organizations were formed.

More warm-up discussion may include pupils' own experience with guided tours.

Changes in an individual influence his environment and changes in environment influence him.

Self-Development

Work involves the acceptance of responsibility for a task.

Attitudes and Appreciations

Occupations require special personal characteristics.

Career Information

. . . *identify language and social skills required to plan and direct simulated tours.* PPO

. . . *discuss the mutual expectations of a travel guide and a traveler on a tour.* PPO

. . . *describe how certain physical, social, and intellectual skills are needed by a tour guide.* PPO

Arrange with the principal and custodians for places in the building, or immediately outside, that would be possible sites and routes for guided tours directed by children.

Organize the class to map out routes, to formulate directions and commentaries, and to provide for publicity.

(See REACT page for a starter.)

Prospective "clients" could be sought among younger children in the same building or perhaps children from another school building in town. At any rate, use members of the class as clients to at least walk through each of the tours for practice.

Help pupils maintain a consciousness of the skills involved in their planning and carrying out of the tour. What responsibilities does the travel agent have? What specific tasks must a tour guide perform?

The REACT page offers a beginning for pupils to plan an in-school tour. Depending on the size of the school and of the class, pupils may work individually, in pairs, or in small groups. Introduce the term "itinerary." Discuss possible places in the building or on the grounds for tours. Consider safety factors, learning conditions, ease of movements, timing, minimum and maximum number of travelers, etc.

SD/Level 5/5

"Recipe for a Tour"

RECIPE FOR A TOUR

In order to plan a tour in your school, you must first decide where you want to take your customers.

Write the name of that place: ______________________________

Then check with those in charge to see if it would be all right to tour that place.

If so, write the names of the people who gave you permission:

____

____

(If you were not able to use that place, choose another and try again.)

You must also answer these questions to get yourself organized:

How old will the customers be?

How many customers will go on one trip?

Where will the customers begin the tour?

Who will guide the tour?

What route will the tour follow?

How long will the tour take?

How will you attract customers?

On the other side of this paper, jot down ideas about what will be said and done during the tour.

With these things done for starters, you and your classmates are on your way to being real live travel agents! HAPPY TOURING!

PATHFINDING PRACTICE

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *describe changes in oneself because of a change in school environment.*

Attitudes and Appreciations Dimension

. . . *identify particular contributions made to society by travel agents.*

Career Information Dimension

. . . *identify materials and equipment needed by a travel agent.*

Educational Awareness Dimension

. . . *relate one's own academic skills to the work of a travel agent.*

Subject Matter Concepts

- Mathematics
  - Problem Solving
    - Multiple-step problems
    - Comparisons
    - Money concepts
  - Measurement
    - Length
    - Time
    - Rates of speed

- Social Studies
  - Geography
    - Routes on maps
    - Scales of miles
  - Sociology-Anthropology
    - Individual characteristics
    - Changing conditions and changing values

Preplanning Suggestions

Timetables from bus, railroad, and airline companies
Road maps, atlases

PATHFINDING PRACTICE

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Occupations require the use of specific materials and equipment.

Career Information

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

This activity concentrates on two specific tasks that a travel agent is very likely to perform continually: interpreting time schedules and planning itineraries.

Secure a good supply of timetables from bus, railroad, and airline companies. (Invite pupils to bring in as many as they can find.) Road maps and atlases will also be needed.

. . . *relate one's own academic skills to the work of a travel agent.* PPO

. . . *identify materials and equipment needed by a travel agent.* PPO

. . . *identify particular contributions made to society by travel agents.* PPO

Help pupils to practice reading the columns of time schedules and other information in the timetables. Call attention to such items as footnotes, time zones, costs, special instructions, etc.

Use the time columns for exercises in calculating time, distance, and rates of speed. How long does it take to get from New York to Indianapolis by train? By plane? By bus? How far is it from New Orleans to Denver by airplane? By bus? By train? How fast must a bus, train, or plane travel to meet a particular schedule?

Written work for pupils may include planning and plotting trips from one city to another--describing modes of travel, rates of speed, distances covered, and time elapsed. How, for

Changes in an individual influence his environment and changes in environment influence him.

Self-Development

example, could you arrange for a person to get from your own town to a small town several hundred miles away?

Meanwhile, maintain a consciousness of these tasks as representative of a travel agent's contributions to his clients and examples of materials that he must use. What other skills and equipment does he need?

> . . . *describe changes in oneself because of a change in school environment.* PPO

The REACT page concentrates on the subconcept of environmental effects upon one's being. The pupil is asked to compare differences in his school environments of the present year and the one just before. Space is provided for personal feelings about the changes.

Discuss general changes involved in a promotion from one school year to the next. Help children to recall their own feelings on the first day back after summer vacation. How did the new conditions make any difference to their feelings and behavior?

SD/Level 5/6

"Year to Year"

YEAR TO YEAR

Every year in school is very different from the year before.

How is this year different from the year you had last year?

HOW IS THE ROOM (OR ROOMS) YOU ARE IN THIS YEAR DIFFERENT FROM LAST YEAR'S?	HOW DO YOU FEEL ABOUT THE DIFFERENCES?
HOW IS THIS YEAR'S SCHOOL WORK DIFFERENT FROM LAST YEAR? In English? In Mathematics? In Social Studies? In Science?	HOW DO YOU FEEL ABOUT THE DIFFERENCES?

RELATED MATERIALS

Community Series: Transportation (Sound Filmstrips) McGraw-Hill Films, 330 West 42nd Street, New York, New York 10036, 1970.

Focus on America--The Near West Region (Sound Filmstrips) Society for Visual Education, 1345 Diversey Parkway, Chicago, Illinois 60614, 1972.

Focus on America--The Northeast Region (Sound Filmstrips) Society for Visual Education, 1345 Diversey Parkway, Chicago, Illinois 60614, 1972.

How Do You Feel? (Filmstrips) Educational Reading Service, 320 Route 17, Mahwah, New Jersey 07430, 1972.

National Park Service Areas of the U.S.A. (Filmstrip) Society for Visual Education, 1345 Diversey Parkway, Chicago, Illinois 60614, 1972.

Time to Grow Up (Book) Candy Jones. Harper and Row, Scranton, Pennsylvania 18512, 1971.

True Book of Travel by Land (Book) J. Beales. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1968.

World Communities--Rural (Film Loops) Society for Visual Education, 1345 Diversey Parkway, Chicago, Illinois 60614, 1972.

World Communities--Urban (Film Loops) Society for Visual Education, 1345 Diversey Parkway, Chicago, Illinois 60614, 1972.

TRAVEL AGENT

The travel agent provides assistance to people who are planning to take trips. These services include mapping itineraries, obtaining reservations for transportation and lodging facilities, securing tickets and other confirmation forms that may be needed, and carrying out whatever other functions may be necessary for a particular situation.

A travel agency can range in size from a one-man operation to a highly complex organization involving specialized personnel. Whether one-man or part of a larger complex, the travel agency must have effective salesmanship to attract and motivate customers. Interests, financial conditions, and available time must be related to alternative suggestions for the best use of the customers' resources. Consultation may include offering information on topics such as relative expenses, passport regulations, health requirements, travel insurance, sightseeing possibilities, etc.

Package tours arranged by other organizations are sometimes sold by a travel agent in addition to, or instead of, his own developments. In either case, organized tours must take into account the leadership of the tour as well as the general and specific logistics for the trip. Tours may be packaged for general sale or may be arranged upon request. In some cases, the travel agent himself might serve as a tour guide.

Bookkeeping and other forms of recording a wide range of information are essential skills for a travel agent. He must be able to contact agents of the establishments to which he wants to send his clients. High standards of accuracy and communications skills are required for dealing with so very many details and different types of people. College training may become more important for employment in the travel business, although no colleges yet offer specific courses in the field. Liberal arts and business administration are recommended as helpful preparation.

Travel experience of one's own can be a source of practical knowledge about the conditions and expectations involved in traveling. Other means to increasing one's capabilities could be reading of relevant periodicals or other literature on travel and visits to or some part-time experience with established travel agents. Work with a transportation company of some kind is a common way for young people to get actively involved in the larger field of travel. Opportunities for advancement normally depend upon the size of the agency or its growth potential. Specialization or the opening of branch offices may provide for certain types of promotions. An employee in an agency may also decide to go into the travel business for himself.

People employed as travel agents doubled within the 15 years ending in 1968. Expectations suggest that the field will continue to grow in opportunities as increasing amount of leisure time, longer retirement conditions, and higher incomes allow more people the time and money for travel. International travel, in particular, is still a relatively minor aspect of the tourist trade and may experience expansion in the future.

The travel business is characterized by high internal competition. Services are generally similar so the individual agent or agency must have some way of appearing "special." Repeat customers and referrals from them are of great importance in keeping up business. A 40-hour week is fairly normal but overtime is likely during rush seasons. Intrinsic advantages may include the contributions of travel to mutual understanding, to education, and to the influence upon economic conditions.

APTLY ANNOUNCING

FIFTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS: An individual can differentiate between himself and others in terms of interests, aptitudes, values and achievements in and out of school.

OCCUPATIONAL FOCUS: Television Announcer

ACTIVITIES IN THIS INFUSION STRATEGY

1. Trippingly on the Tongue
2. The Guys Behind the Guys Behind the Mike
3. Action! Camera!

Teacher Goals

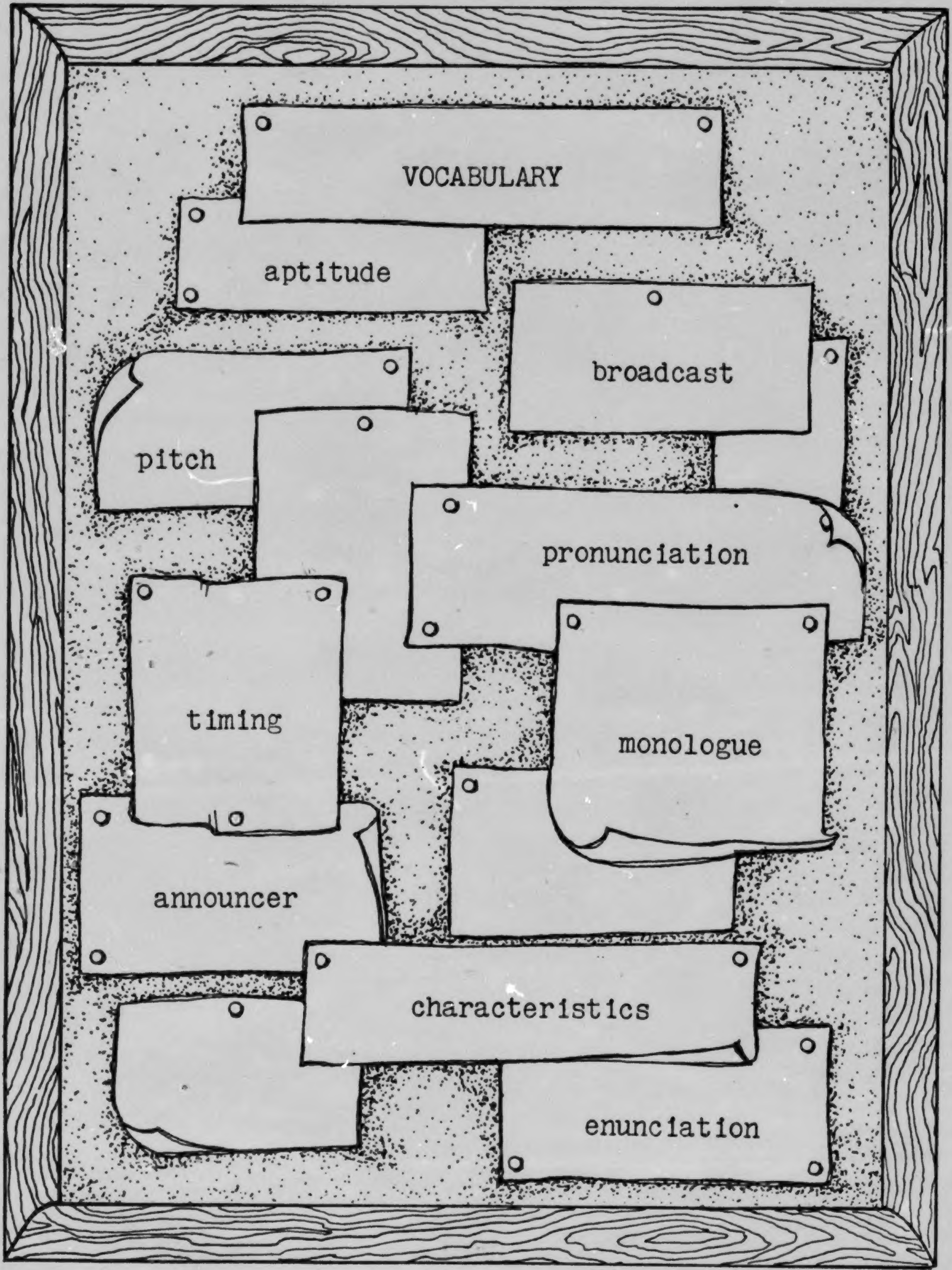
Teacher goals of this strategy combine a Self-Development Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Television Announcer. In this perspective the teacher's goals are to:

Provide pupils with opportunities for analyzing and comparing their own interests, aptitudes, values, and achievements.

Structure learning experiences involving direct and indirect contact with television and radio broadcasting.

Encourage study of particular tasks performed by television personnel.

Guide pupils' practice in improving speech skills.


VOCABULARY
aptitude
broadcast
pitch
pronunciation
timing
monologue
announcer
characteristics
enunciation

TRIPPINGLY ON THE TONGUE

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *discuss the normality of individual differences in speech skills.*

. . . *cooperate with classmates in comparing interests and aptitudes for certain activities.*

Attitudes and Appreciations Dimension

. . . *discuss television announcing as a job for both men and women.*

. . . *cooperate in group responsibility for practicing speech skills.*

Career Information Dimension

. . . *describe how speaking skills are essential for a television announcer.*

. . . *distinguish reasons for dress requirements for a television announcer.*

Educational Awareness Dimension

. . . *tell the results of one's deliberate efforts to improve a particular speech skill.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Formal and informal language
    - Control pitch, volume, tone
    - Stress and feeling
    - Avoiding excessive extra sounds

- Social Studies
  - Sociology-Anthropology
    - Individuality and responsibility
    - Group interactions

Preplanning Suggestions

Tape recorders or cassettes
Visit to the classroom by an announcer
Dictionaries with pronunciation keys
Books about announcing and announcers

TRIPPINGLY ON THE TONGUE

Occupations require special personal characteristics.

Career Information

A great many tasks can be performed by men or women.

Attitudes and Appreciations

Occupations may have certain dress requirements.

Career Information

If there is a single most important attribute for a television announcer, it is probably voice control. That control can be thought of in terms of enunciation, pitch, volume, timbre, and timing. This activity deals with exercises to practice effective speaking. Tape recorders should be used it at all possible.

. . . *describe how speaking skills are essential for a television announcer.* PPO

. . . *discuss television announcing as a job for both men and women.* PPO

. . . *distinguish reasons for dress requirements for a television announcer.* PPO

Discuss with pupils their perceptions of specific television announcers. Talk about their need to consider appearance as well as speech skills. When and how do announcers appear? When do you hear but not see them? How do their visual images, behavior, and dress enhance their speaking roles? How does the number of women announcers compare to that of men? Use this discussion to zero in on the speech skills, and prepare to structure practice activities for individual or small group participation.

Keep the demands of this activity reasonable. Practice on timing, pitch, and enunciation may be considered as not excessive for most pupils. Demonstrations by high school pupils, other teachers, or adults from the community can be helpful in developing ideas of enunciation, pitch, and timing. If a local television or radio announcer is available for a visit, so much the better.

Work involves the acceptance of responsibility for a task.

Attitudes and Appreciations

Learning achievement depends upon effort and ability.

Educational Awareness

. . . *cooperate in group responsibility for practicing speech skills.* PPO

Divide the class into groups of three or four pupils for mutual help in practicing pronunciation, timing, and pitch. The group can write out an introduction to a television show, a station break announcement, or a public service message, etc., as their "text." Encourage use of the pronunciation key of a dictionary--even for very simple words that "we all know anyway." (The words we "know" are the ones that help us to understand and use the key.)

Explain pitch in relation to muscial notes. An eight-syllable statement could run up (or down) the scale:

AND NOW A WORD FROM OUR SPON SOR!

C D E F G A B C

The combinations of pitches are practically limitless and can help to develop the consciousness of this speech skill. Compare the changing of pitch to speaking in a monotone. Aim ultimately for the use of varying pitch for stress and other effects in speech.

Timing involves the pace of one's speed when speaking. Fast, medium, or slow depends upon purpose and/or emotion. Often higher pitch and faster delivery go together and lower pitch with slower delivery. Children may be induced to reverse these combinations. In general, exaggerated slowness may enhance control of pitch or enunciation.

Individuals or groups may volunteer to perform for the whole class. Meanwhile, the teacher shall have overseen the work in the group.

. . . *tell the results of one's deliberate efforts to improve a particular speech skill.* PPO

An individual can differentiate between himself and others in terms of interests, aptitudes, values, and achievements in and out of school.

Self-Development

. . . *discuss the normality of individual differences in speech skills.* PPO

Discuss how the speech practice helped to improve individual skills. Keep acknowledgement of differences in interests and aptitudes on an objective plane. They are existent. "We are all different; we are all learning. Let's keep helping each other." The active participation of the teacher in such practice can be exceptionally valuable.

Of course, don't forget the television announcer! What kinds of schooling would he have needed? Do we think he might have practiced something like we have practiced? Would he have been a talkative person to begin with? How could a bashful person become an announcer? What things might a television announcer need to continue to learn?

An individual can differentiate between himself and others in terms of interests, aptitudes, values, and achievements in and out of school.

Self-Development

. . . *cooperate with classmates in comparing interests and aptitudes for certain activities.* PPO

The REACT page deals with the self-development subconcept of personal differences. Once again, this is an opportunity to acknowledge differences in tastes and skills without passing judgments.

Use the children's checklists to tabulate data about their aptitudes and interests for the items listed. Tallying can be done on the chalkboard and/or individual papers. The tallies can then be transferred to some form of graph.

SD/Level 5/7

"Things I Do"

THINGS I DO

A number of things you often do are listed below.

Check each activity to show whether you find it easy or not and whether you like it or don't like it.

If you have never done the activity, leave it blank.

	EASY	NOT EASY	LIKE	DON'T LIKE
Do Arithmetic				
Give Oral Reports				
Write Reports				
Write Letters				
Play With a Ball				
Sit Quietly				
Watch Television				
Use Tools				
Run Races				
Use the Telephone				
Help at Home				

Compare your checks with those of your classmates.

Which activity was liked by the most people?

Which activity was easiest for the most people?

Why are some things easy for one person but not for another?

Why are some things liked by one person but not by another?

THE GUYS BEHIND THE GUYS BEHIND THE MIKE

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *compare one's own work interests and aptitudes with those of a particular television announcer.*

Attitudes and Appreciations Dimension

. . . *explain the interdependence of specializations connected with a television broadcast.*

Career Information Dimension

. . . *describe at least two different work settings for television announcers.*

. . . *describe the tasks performed by personnel during regular news broadcasts by a local television station.*

Educational Awareness Dimension

. . . *identify intellectual, physical, or artistic skills required by particular television workers.*

Subject Matter Concepts

- Social Studies
  - Economics
    - Role differentiations
    - Interdependence
  - Sociology-Anthropology
    - Technology changes ways of living.
    - Group interactions

Preplanning Suggestions

Audio-visual aids and books about broadcasting for research
Visit a studio.
Have television sets in the school or suggest that children watch at home.

THE GUYS BEHIND THE GUYS BEHIND THE MIKE

Naturally, television announcers cannot do their jobs without the work of many others. This activity seeks to describe various work settings in which an announcer might operate. Warm up to the idea by discussing what the children already think about the work settings of television announcers.

Career-oriented learning may take place in school or out of school.

Educational Awareness

. . . identify a given number of facts about television announcers learned outside of school.

Occupations have their own work settings.

Career Information

. . . describe at least two different work settings for television announcers.

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

. . . explain the interdependence of specializations connected with a television broadcast.

Supply information about television broadcasting by means of audiovisual aids, printed materials, and/or (if possible) a visit to the classroom by an employee of a television station. Keep the announcer as the central figure and seek to identify various kinds of announcers, the types of programs or spots in which they are used, and the supportive personnel involved. These latter workers could include:

film projectionist
commentator
floor manager
operations head
cameraman
copywriter
electrical engineer
lighting engineer
sound man
office boy
maintenance personnel
clerical personnel
etc.

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

An individual can differentiate between himself and others in terms of interests, aptitudes, values, and achievements in and out of school.

Self-Development

Occupations require special personal characteristics.

Career Information

How is a sports announcer different from one who introduces a program series? Which announcers do you see regularly? Which ones are normally heard but not seen? Which announcers are active in controlling or taking part in whatever is going on? How does each of the other workers contribute to the announcer's work? How does the announcer contribute to the work of others?

> . . . *identify intellectual, physical, or artistic skills required by particular television workers.* PPO

> . . . *compare one's own work interests and aptitudes with those of a particular television announcer.* PPO

Either via oral discussion, written assignments, or charts or bulletin board displays have pupils describe the many skills needed by workers involved in a given television program. Set a limit of types of workers so that some depth of consideration may be achieved. Include the feelings that each pupil has about his own interests and aptitudes toward television announcing at this time. Have them compare themselves to a particular television announcer.

> . . . *describe the tasks performed by personnel during regular news broadcasts by a local television station.* PPO

The REACT page directs attention to the regular news broadcasts of a local television station. This ought to be largely a class activity. Decide on a specific, regular news broadcast to be observed and analyzed in terms of the people who actually appear on the screen. Have pupils share these observations as descriptive reports of "what is seen and heard." Then either visit or write to the station to find out what other personnel are involved in those broadcasts and what their tasks are.

SD/Level 5/8

"The News Reports"

THE NEWS REPORTS

One of the most common television programs broadcast regularly by local television stations is the "news, sports, and weather report." They usually are on the air in the early evening--just after the early show or the kids' programs, and just before the "prime time" programs get started.

Watch this news broadcast by your local television station for two or three days in a row. On the chart below, list the names and duties of all of the people who actually appear on the screen during the program.

NAME OF PERSON	WHAT THE PERSON DOES	WHAT SKILLS THE PERSON NEEDS

After you have identified the persons who appear on the screen during the news broadcasts, try to find out what other persons are at work to help put the news programs on the air. Discuss with your teacher the best ways to go about finding out who those other persons are and what they do.

Use the chart on the other side of this paper to identify the workers behind the scenes.

NAME OF PERSON BEHIND THE SCENES	WHAT THE PERSON DOES	WHAT SKILLS THE PERSON NEEDS

ACTION! CAMERA!

Fifth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *describe how one's own participation in a television worker dramatization differed from that of a classmate.*

Attitudes and Appreciations Dimension

. . . *cite supportive tasks for a given television show as suitable for men or women.*

Career Information Dimension

. . . *list materials and equipment used for a particular television broadcast.*

Educational Awareness Dimension

. . . *relate one's own learning achievements to a simulation of television broadcasting.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Role playing
    - Formal and informal language
    - Control of speech
    - Stress and feeling
  - Writing Skills
    - Changing points of view
    - Characterization and plot
    - Writing quotations

Preplanning Suggestions

Simulated materials for broadcasting
Area for dramatizing broadcasts

ACTION! CAMERA!

Occupations require the use of specific materials and equipment.

Career Information

A great many tasks can be performed by men or women.

Attitudes and Appreciations

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

An individual can differentiate between himself and others in terms of interests, aptitudes, values, and achievements in and out of school.

Self-Development

This activity suggests a series of role playing situations whereby children may simulate the tasks of television announcers in varying circumstances. Use the perspective of the previous two activities to consider different possibilities for subjects of skits, monologues, or even more elaborate presentations of television workers on the job. Don't let a "television program" take over as the main theme--concentrate on the people who are making a particular program possible. This may involve more before-the-show and behind-the-scenes activity than the program itself.

. . . *list materials and equipment used for a particular television broadcast.* PPO

. . . *cite supportive tasks for a given television show as suitable for men or women.* PPO

. . . *relate one's own learning achievements to a simulation of television broadcasting.* PPO

Role playing can be as simple or elaborate as time, available materials, physical conditions, pupil capacities, and teacher nervous exhaustion tendencies will allow. Encourage inclusion of ideas about materials and equipment used in television broadcasting, tasks performed by either women or men, and acknowledgement of the intellectual, social, and physical skills required. Anticipate relating individual pupil capacities to appropriate roles.

. . . *describe how one's own participation in a television worker dramatization differed from that of a classmate.* PPO

Aim unobtrusively toward a gentle, objective appreciation of individual differences in achievements as they happen to show up in these kinds of activities. Stress positive achievements no matter how simple. Clarify the perspective of what I can do now as compared to how I can do better after more practice, learning, or growth.

The REACT page invites imaginative thought to personalize a piece of equipment in a television studio. Instruct pupils about the idea of a monologue which would be a likely vehicle for this approach. The result may be written and/or oral. For oral presentations, a review of the pronunciation-pitch-timing practice may be profitably encouraged.

SD/Level 5/9

"The Way I See It"

THE WAY I SEE IT

You know what it is like to watch a television show.

You have acted out plays about how a television show might appear to the workers who make it possible.

Did you ever wonder how a television show appears to one of the cameras? Or, what might a microphone see and hear during a broadcast?

Think about how a certain television show would appear through the "eyes" and "ears" of a piece of equipment. It might even smell or feel things that go on, too!

Here are some objects that you might use as your "observer:"

a clock on the wall of the studio
a spotlight (with or without revolving colors)
a headset worn by one of the workers
an electrical extension cord
a doorknob on the inside of one of the studio doors
a wastebasket beside the director's desk
the floor of the studio
a piece of furniture used in the show
an outdoor camera at a football game being played in the rain

You can probably think of some other things yourself. Whatever you choose, put your ideas into a monologue form. (That's when just one person does all the talking.) Tell what your "creature" is thinking and feeling about what is going on in the television studio.

RELATED MATERIALS

Behind the Scenes of Television Programs (Book) Leon Harris. J. B. Lippincott Company, East Washington Square, Philadelphia, Pennsylvania 19105, 1972.

Come to Work with Us in a TV Station (Book) Jean Wilkinson and Ned Wilkinson. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1971.

Developing Basic Values (Sound Filmstrips) Society for Visual Education, 1345 Diversey Parkway, Chicago, Illinois 60614, 1972.

Me, Myself, and I (Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1969.

People Who Influence Others (Filmstrips) Guidance Associates, Pleasantville, New York 10570, 1972.

Television Serves the Community (Film, Color, 14½-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

Television Works Like This (Book) Jeanne Bendick and Robert Bendick. McGraw-Hill Book Company, Inc., 330 West 42nd Street, New York, New York 10036, 1965.

You Visit a Newspaper; Television Station (Book) Leonard Meshover. Benefic Press, 10300 West Roosevelt Road, Westchester, Illinois 60153, 1973.

Your Future in Television (Book) J. Noel Beutscher. Richards Rosen Press, 29 East 21st Street, New York, New York 10010, 1963.

TELEVISION ANNOUNCER

Television staff announcers present news and live programs, describe sporting events, act as masters of ceremonies, conduct interviews, and identify stations. In small stations, they may perform additional duties such as operating the control board, selling time, and writing commercial and news copy.

Most television stations employ three staff announcers, although larger stations may employ four or more. In addition to staff announcers, many freelance announcers sell their services for individual assignments to networks and stations, or to advertising agencies and other independent producers for programs and commercials. Some announcers become well-known and highly paid personalities.

An announcer must have a pleasant and well-controlled voice, a good sense of timing, and excellent pronunciation. A thorough knowledge of correct English usage and a knowledge of dramatics, sports, music, and current events improve chances for success. Personal appearance is also highly important for a television announcer. He must be able to react quickly and imaginatively to unusual situations. He also must be a convincing salesman when presenting commercials. Most announcers are men but there are a few opportunities for women, especially in programs and commercials aimed at women.

High school courses in English, public speaking, dramatics, and foreign languages, plus sports and music hobbies, are valuable background for prospective announcers. A number of vocational schools offer training in announcing and some universities offer broadcasting courses. A college liberal arts education also provides an excellent background for an announcer.

Most announcers start in small stations and usually work in several different stations in the course of their careers. Competition for announcing jobs in the national networks is strong and a college degree plus several successful years of experience are normally required for an audition.

The employment of announcers is expected to increase moderately in the 1970's as new stations are opened. However, automatic programming will reduce slightly these anticipated gains in openings. Earnings of staff announcers depend upon the size of the station and the size of the community. Television announcers tend to earn more than those in radio. In addition to salaries, some announcers may get fees from advertisers.

Most announcers in large stations work a 40-hour week and receive overtime for work beyond that. Evening, night, and weekend work occurs frequently since some stations are on the air 24 hours a day, 7 days a week. Working hours consist both of time on the air and time spent in preparation for broadcasts.

Working conditions usually include a variety of work and many personal contacts. The possibility of becoming well known in the area their station serves is another feature of the announcer's job expectations.

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 740-741.

MASTER INDEX OF INFUSION STRATEGY CONTENTS

CB - COPING BEHAVIORS	LS - LIFESTYLE
DM - DECISION MAKING	SD - SELF-DEVELOPMENT

Sixth Experience Level

LANGUAGE ARTS

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Grammar and Usage)					
CB	Tales of Sales	Retail Sales Clerk	Check Up Time	Labeling and classifying	250
SD	Know Thy Chickens	Poultry Farmer	Chicken Game	Labeling and classifying	388
SD	Know Thy Chickens	Poultry Farmer	Poultry Products	Labeling and classifying	394
(Listening and Speaking)					
CB	Tales of Sales	Retail Sales Clerk	Check Up Time	Giving and taking directions	250
CB	Tales of Sales	Retail Sales Clerk	Clerk Work	Role playing Giving and taking directions Noting and remembering details	256
CB	Tales of Sales	Retail Sales Clerk	Clerks of All Kinds	Discussion skills Noting details	260
CB	Environments for Efficiency	Industrial Engineer	Space and Stuff	Discussion skills Giving and taking directions	287
CB	Environments for Efficiency	Industrial Engineer	Time Study	Discussion skills Giving and taking directions	292
DM	A State of Really Selling	Real Estate Salesman	Loan Amortization	Playing roles with dialogue	304
DM	A State of Really Selling	Real Estate Salesman	Neighborhood Canvass	Interviewing Reporting	311
DM	Search and Solve	Detective	Perception Practice	Discussion Giving and taking directions	330
DM	Search and Solve	Detective	Interview	Interviewing Discussion Listening Role playing with dialogue	336
DM	Search and Solve	Detective	The Detective Story	Discussion Listening	340
SD	Know Thy Chickens	Poultry Farmer	Chicken Game	Discussion skills Noting and remembering details	388
SD	Know Thy Chickens	Poultry Farmer	Poultry Products	Discussion skills	394
SD	Know Thy Chickens	Poultry Farmer	Touch of Drama	Playing roles with dialogue Pantomime Discussion skills	398
SD	Keep on Truckin'	Truck Driver	Some Horses' Mouths	Listen for comprehension Discussion skills Interviewing	434
(Reading)					
CB	Tales of Sales	Retail Sales Clerk	Pinpoint Pattern	For information	264
CB	Environments for Efficiency	Industrial Engineer	World of Engineering	For information Reference sources	276
CB	Environments for Efficiency	Industrial Engineer	Through the Years	For information Making inferences	282
DM	A State of Really Selling	Real Estate Salesman	Spreading the Word	Making inferences	316
LS	Leisure and Labor at Sea	Oceanographer	Fact and Fiction	Judgments of stories, characters Visual imagination For information Noting tone and mood	376
SD	Know Thy Chickens	Poultry Farmer	Chicken Game	For information Library skills Topics and subtopics	388
(Writing Skills)					
CB	Tales of Sales	Retail Sales Clerk	Clerks of All Kinds	Reports from research	260
DM	A State of Really Selling	Real Estate Salesman	Spreading the Word	Advertisements	316
DM	Search and Solve	Detective	Perception Practice	Descriptions	330
DM	Search and Solve	Detective	The Detective Story	Descriptions	340
LS	Leisure and Labor at Sea	Oceanographer	Marine Life	Characterization and plot	362
LS	Leisure and Labor at Sea	Oceanographer	Fact and Fiction	Vocabulary building	376

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Writing Skills Cont'd)					
SD	Know Thy Chickens	Poultry Farmer	Chicken Game	Writing a summary Outlining Paragraphing Note-taking	388
SD	Keep on Truckin'	Truck Driver	Some Horses' Mouths	Characterization and plot Descriptions	434

Sixth Experience Level

MATHEMATICS

(Facts and Operations)					
CB	Tales of Sales	Retail Sales Clerk	Check Up Time	Counting, grouping	250
DM	A State of Really Selling	Real Estate Salesman	Loan Amortization	Percents	304
LS	Leisure and Labor at Sea	Oceanographer	The Ocean's Water	Decimal fractions Percents	367
(Figural)					
CB	Tales of Sales	Retail Sales Clerk	Check Up Time	Graphs, tables	250
DM	A State of Really Selling	Real Estate Salesman	Loan Amortization	Tables of data	304
DM	A State of Really Selling	Real Estate Salesman	Spreading the Word	Scale drawing	316
SD	Keep on Truckin'	Truck Driver	Over-the-Road	Graphs	440
(Measurement)					
DM	A State of Really Selling	Real Estate Salesman	Spreading the Word	Area	316
SD	Influential Ingredients	Chef/Cook	Behind the Scenes	Precision in measuring	416
(Problem Solving)					
CB	Tales of Sales	Retail Sales Clerk	Check Up Time	Keeping accounts Money concepts	250
CB	Tales of Sales	Retail Sales Clerk	Clerk Work	Money concepts Percents	256
DM	A State of Really Selling	Real Estate Salesman	Loan Amortization	Multiple-step problems	304
DM	A State of Really Selling	Real Estate Salesman	Neighborhood Canvass	Averages	311
LS	Leisure and Labor at Sea	Oceanographer	The Ocean's Water	Comparisons Multiple-step problems	367
SD	Keep on Truckin'	Truck Driver	Over-the-Road	Estimating outcomes Ratio Multiple-step problems Money concepts	440

Sixth Experience Level

SCIENCE

(Biology)					
LS	Leisure and Labor at Sea	Oceanographer	Underwater Observations	Animals and plants range from one-celled to complex. Living things adapt to environment. Man can control environments of living things. Animals differ in size and structure.	356
LS	Leisure and Labor at Sea	Oceanographer	Marine Life	Animals differ in size, structure, movement. Living things grow. Living things adapt to environment. Living things need food, air, waste disposal; reproduce.	362
SD	Know Thy Chickens	Poultry Farmer	Chicken Game	Living things need food, air, waste disposal; reproduce. Man can control environments of living things.	388

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Biology Cont'd)					
SD	Influential Ingredients	Chef/Cook	Menu Musings	Living things need food and water. Cells develop into tissues and organs. Concepts related to disease Human body systems	410
SD	Influential Ingredients	Chef/Cook	Behind the Scenes	Concepts related to crobes, disease, vaccination Living things need food, air.	416
(Chemistry)					
LS	Leisure and Labor at Sea	Oceanographer	The Ocean's Water	Material things are gas, liquid, solid. Matter is composed of atoms and molecules. Elements have one type of atom in a molecule.	367
(Scientific Method)					
LS	Leisure and Labor at Sea	Oceanographer	Underwater Observations	Use of senses to gather data Categorizations	356
LS	Leisure and Labor at Sea	Oceanographer	Marine Life	Describe similarities and differences	362
LS	Leisure and Labor at Sea	Oceanographer	Famous People of the Sea	Investigative and evaluative techniques Specialized instruments Famous scientists made discoveries. New fields of investigation	371
LS	Leisure and Labor at Sea	Oceanographer	Fact and Fiction	Scientific knowledge accumulates. Famous scientists made discoveries. New fields of investigation	376
SD	Influential Ingredients	Chef/Cook	Menu Musings	Categorizations	410
SD	Influential Ingredients	Chef/Cook	Behind the Scenes	Scientific knowledge accumulates.	416
SD	Keep on Truckin'	Truck Driver	Over-the-Road	Categorization	440

Sixth Experience Level

SOCIAL STUDIES

(Economics)					
CB	Tales of Sales	Retail Sales Clerk	Check Up Time	Stores Needs and wants Role differentiation	250
CB	Tales of Sales	Retail Sales Clerk	Clerk Work	Stores Role differentiation	256
CB	Tales of Sales	Retail Sales Clerk	Clerks of All Kinds	Goods and services Role differentiation Interdependence Stores	260
CB	Environments for Efficiency	Industrial Engineer	World of Engineering	Goods and services Division of labor Uses of environment Supply and demand	276
CB	Environments for Efficiency	Industrial Engineer	Through the Years	Labor unions Governmental regulations Production of goods and services Labor systems	282
DM	A State of Really Selling	Real Estate Salesman	Title Transfer	Competition for resources	321
LS	Leisure and Labor at Sea	Oceanographer	Famous People of the Sea	Using natural resources	371
SD	Know Thy Chickens	Poultry Farmer	Chicken Game	Division of labor Production of goods and services Interdependence of city and rural	388
SD	Know Thy Chickens	Poultry Farmer	Poultry Products	Supply and demand Transportation of goods Interdependence of city and rural Division of labor	394
SD	Know Thy Chickens	Poultry Farmer	Touch of Drama	Division of labor Goods and services Interdependence of city and rural	398
SD	Influential Ingredients	Chef/Cook	Behind the Scenes	Division of labor Goods and services Labor systems Use of resources and capital	416

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Economics Cont'd)					
SD	Keep on Truckin'	Truck Driver	Some Horses' Mouths	Division of labor Goods and services Transportation of goods Interdependence	434
(Geography)					
CB	Tales of Sales	Retail Sales Clerk	Pinpoint Patterns	Map keys Special purpose maps	264
LS	Leisure and Labor at Sea	Oceanographer	Famous People of the Sea	Man-made environmental changes	371
SD	Know Thy Chickens	Poultry Farmer	Touch of Drama	Interaction between people and environments Modification of environments	398
SD	Keep on Truckin'	Truck Driver	Over-the-Road	Trace routes on maps Scale of miles Map keys	440
(History)					
CB	Environments for Efficiency	Industrial Engineer	Through the Years	Industrial Revolution Rate of change Relation of geography and history Modern life has roots in the past.	282
DM	A State of Really Selling	Real Estate Salesman	Title Transfer	Modern life has roots in the past.	321
LS	Leisure and Labor at Sea	Oceanographer	Famous People of the Sea	Human experience is continuous and interrelated.	371
LS	Leisure and Labor at Sea	Oceanographer	Fact and Fiction	Exploration Human experience is continuous and interrelated. Relation of geography and history	376
(Political Science)					
CB	Environments for Efficiency	Industrial Engineer	World of Engineering	Authority structures Rules for interaction Community rights and requirements	276
CB	Environments for Efficiency	Industrial Engineer	Space and Stuff	School rules Community rights and requirements Effects of common goals	287
CB	Environments for Efficiency	Industrial Engineer	Time Study	School rules Community rights and requirements Traditional values, beliefs	292
DM	A State of Really Selling	Real Estate Salesman	Title Transfer	Rules for interaction	321
DM	Search and Solve	Detective	Tools of the Trade	Rules for interaction Constitutional basis for law	344
SD	Keep on Truckin'	Truck Driver	Rules of the Road	Government services Laws regulate behavior.	445
(Sociology-Anthropology)					
CB	Tales of Sales	Retail Sales Clerk	Pinpoint Patterns	Community's wants and needs Community reflects assumptions and values.	264
CB	Environments for Efficiency	Industrial Engineer	Space and Stuff	Individuals and groups are interdependent. Changing conditions produce changing values.	287
CB	Environments for Efficiency	Industrial Engineer	Time Study	Changing conditions produce changing values. Individuals and groups are interdependent.	292
DM	A State of Really Selling	Real Estate Salesman	Neighborhood Canvass	Housing Values and purposes in behavior	311
DM	A State of Really Selling	Real Estate Salesman	Title Transfer	Individual characteristics Values and purposes in behavior	321
DM	Search and Solve	Detective	Tools of the Trade	Technology produces changes. Individual characteristics Variety of services	344
SD	Influential Ingredients	Chef/Cook	Menu Musings	Individual characteristics Values and purposes	410
SD	Influential Ingredients	Chef/Cook	Behind the Scenes	Individual characteristics Values and purposes	416
SD	Influential Ingredients	Chef/Cook	The Home Front	Membership in a group Individuality and responsibility Values and purposes Technology produces changes in ways of living. Similar basic needs	422

Dimension	Infusion Strategy	Occupation	Activity	Subject Matter	Page
(Sociology-Anthropology Cont'd)					
SD	Keep on Truckin'	Truck Driver	Some Horses' Mouths	Community's wants and needs Dependence on others	434
SD	Keep on Truckin'	Truck Driver	Over-the-Road	Membership in a group Individuality and responsibility	440
SD	Keep on Truckin'	Truck Driver	Rules of the Road	Technology changes ways of living. Community's wants and needs	445

TALES OF SALES

SIXTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS:	There are effective interpersonal relations skills for giving and evaluating instructions.
OCCUPATIONAL FOCUS:	Retail Salesclerk

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Check-Up Time
2. Clerk Work
3. Clerks of All Kinds
4. Pinpoint Patterns

Teacher Goals

Teacher goals of this strategy combine a Coping Behaviors Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Retail Salesclerk. In this perspective the teacher's goals are to:

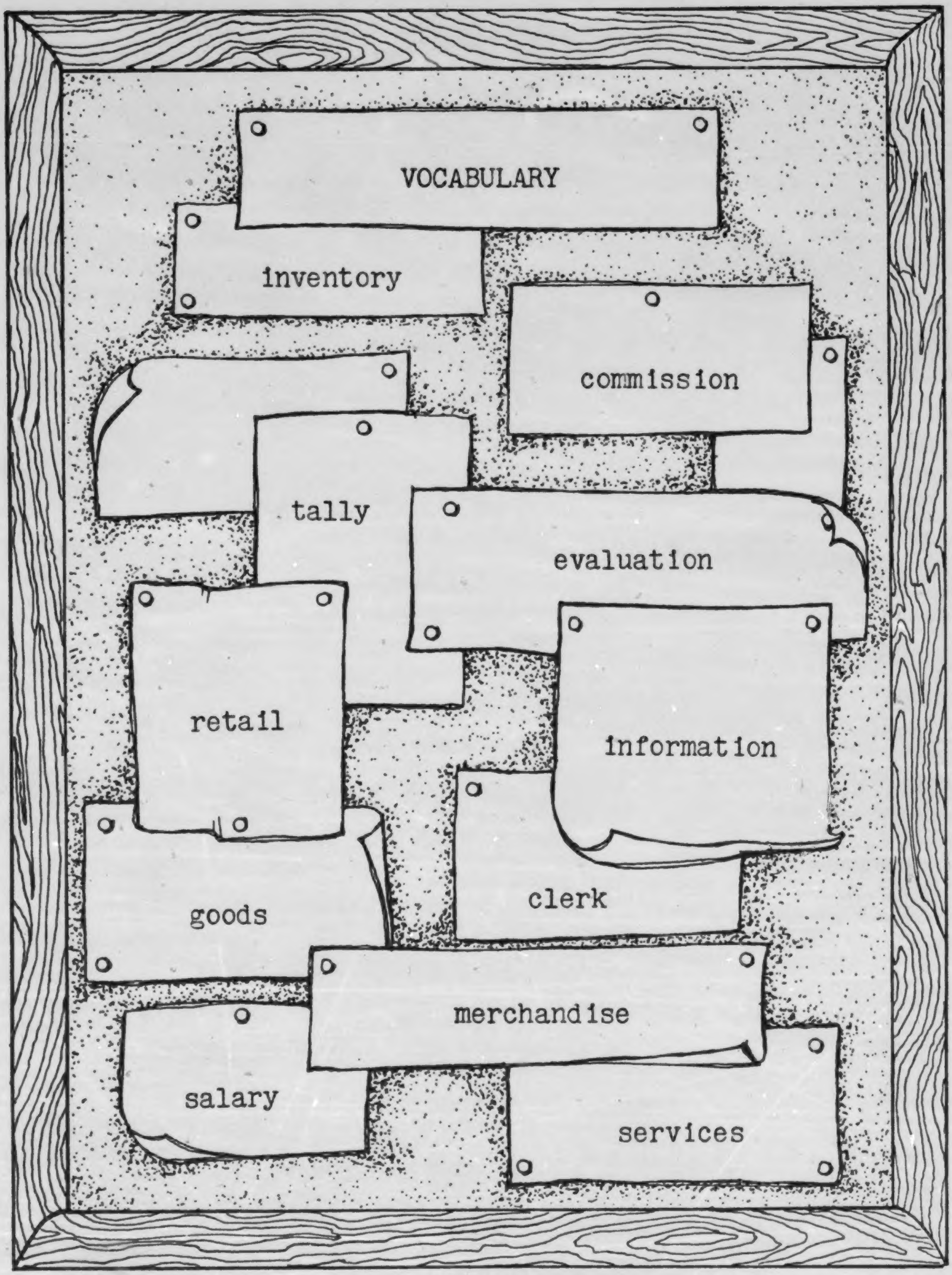
Establish pupils' understanding of needs for and conditions of instructions and directions.

Provide opportunities for pupils to apply academic skills to simulated retail sales situations.

Structure experiences in which pupils can practice giving and taking instructions.

Enlarge pupils' appreciation of the wide variety of retail sales positions and contributions.

Help pupils relate retail sales to the larger world of work.


VOCABULARY
inventory
commission
tally
evaluation
retail
information
goods
clerk
merchandise
salary
services

CHECK-UP TIME

Sixth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *distinguish between questions which ask for information and for evaluation.*

. . . *use or follow nonverbal signals to carry out inventorying of classroom materials.*

Attitudes and Appreciations Dimension

. . . *describe the mutual responsibilities involved in a classroom inventory.*

Career Information Dimension

. . . *relate an inventory activity to possible occupational competence.*

. . . *describe the work settings of at least three retail stores.*

Educational Awareness Dimension

. . . *identify physical or artistic skills helpful in organizing materials for sale or display.*

Subject Matter Concepts

- Mathematics
  - Figural
    - Graphs, tables
  - Problem Solving
    - Keeping accounts
    - Money concepts
  - Facts and Operations
    - Counting, grouping

- Social Studies
  - Economics
    - Stores
    - Needs and wants
    - Role differentiations

- Language Arts
  - Listening and Speaking
    - Giving and taking directions
  - Grammar and Usage
    - Labeling and classifying

Preplanning Suggestions

Copies of inventory forms from the school and other businesses
Catalogs with lists of costs of some classroom supplies

CHECK-UP TIME

Work involves the acceptance of responsibility for a task.

Attitudes and Appreciations

There are effective interpersonal relations skills for giving or evaluating instructions.

Coping Behaviors

Career development includes progression through stages of education and occupational training.

Career Information

Consider the entire classroom as a "store," in which most of the materials are the goods that are for sale. The main function of this activity is to use those materials as the objects of an inventory--including classification, cost estimates, and possible rearrangements of goods. Copies of inventory forms actually used by the school can help organize the method of recording.

. . . *describe the mutual responsibilities involved in a classroom inventory.* PPO

. . . *distinguish between questions which ask for information and for evaluation.* PPO

. . . *relate an inventory activity to possible occupational competence.* PPO

Appoint, or have two or three "managers" elected, to direct the inventorying and organizing of all the materials in the room. Decisions will need to be made regarding which materials will be counted, how to do the counting, possible display arrangements, methods of classification and recording, and bases for estimating money values. This is a good context for comparing evaluative questions (What should we include? What would be an attractive, or practical, arrangement of goods?) and informational ones (How many reading books are there? Do the encyclopedias fit on a given shelf?). Clarify understanding of an inventory as a periodic routine in retail sales establishments. Help children to relate the idea of inventorying to their own responsibilities for keeping track of and accounting for things in their own lives.

There are effective interpersonal relations skills for giving or evaluating instructions.

Coping Behaviors

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Occupations have their own work settings.

Career Information

Does this kind of activity suggest interest or aptitude to any of the pupils? What implications are there for cooperation?

. . . *use or follow nonverbal signals to carry out inventorying of classroom materials.* PPO

. . . *identify physical or artistic skills helpful in organizing materials for sale or display.* PPO

While the inventorying is going on, encourage conscious use of hand signals and other forms of nonverbal communication as means for giving and following directions. For example, quantities can be indicated by numbers of fingers and directions for moving or placing objects by pointing. It may be possible for children to invent a more specialized system of signalling. Discuss possible advantages and disadvantages of both nonverbal and verbal interactions.

A main culminating feature of this activity should be a well-organized listing of quantities of goods, descriptions, and the calculations of money values. Graphs and tables can be used to show quantities and comparisons.

. . . *describe the work settings of at least three retail stores.* PPO

The REACT page contains a checklist which may be used to record observations of the ways certain stores display and store their goods. (Extra columns are provided for additional conditions.) Encourage inferences about working conditions and skills needed as suggested by the kinds of goods and their arrangements.

CB/Level 6/1

"How the Stores Stack Up"

HOW THE STORES STACK UP

Choose three different kinds of stores as subjects for observation.

Look for the ways that each store displays or stores its goods.

Use this checklist to identify display or storage equipment.

	SHELVES	CABINETS	BINS	TABLES	DRAWERS	CASES	COUNTERS		
Name of store Kind of store									
Name of store Kind of store									
Name of store Kind of store									

Which store would be the easiest to inventory? Why?

Which store would be the hardest to inventory? Why?

Which store would you most like to work in? Why?

CLERK WORK

Sixth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *use one's voice appropriately in at least two different salesclerk tasks.*

Career Information Dimension

. . . *describe the differences between salary and commission.*

Educational Awareness Dimension

. . . *relate one's own academic skills to a retail sales situation.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Role playing
    - Giving and taking directions
    - Noting and remembering details
- Mathematics
  - Problem Solving
    - Money concepts
    - Percents
- Social Studies
  - Economics
    - Stores
    - Role differentiations

Preplanning Suggestions

Sales slips, clerk identification tags, and other necessary sales clerk records (If these are not available, secure the appropriate materials for making your own.)
Play money, check forms, credit card slips

Either in conjunction with the inventory activity, or in a separate context, provide opportunities for pupils to role play various retail clerk experiences. Prepare containers for cash registers, name tags or some other identification for clerks, and forms to use as sales slips and play money.

Earnings vary with occupations.

Career Information

. . . describe the difference between salary and commission. PPO

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

. . . relate one's own academic skills to a retail sales situation. PPO

There are effective interpersonal relations skills for giving or evaluating instructions.

Coping Behaviors

. . . use one's voice appropriately in at least two different salesclerk tasks. PPO

Capitalize on the "playing store" interests of the pupils to incorporate interpersonal relationships into the usual buying and selling activities--e.g., questions about sizes, colors, styles; demonstration of the use of a product; conversation among store employees; non-sales duties of a salesclerk. Stress voice differences for describing, being cordial, "pressuring," etc.

Guide role playing to include differences in treatment of customers--does the clerk wait to be asked for help or take the initiative? Which treatment do children actually prefer when they go to a store? Does it depend on the type of store, on their mood at the time, amount of time, etc.?

Besides the money calculations of sales, include the ideas of salary and commissions in the math concepts used.

Compare getting paid by salary alone, by commission alone, and by a combination of both.

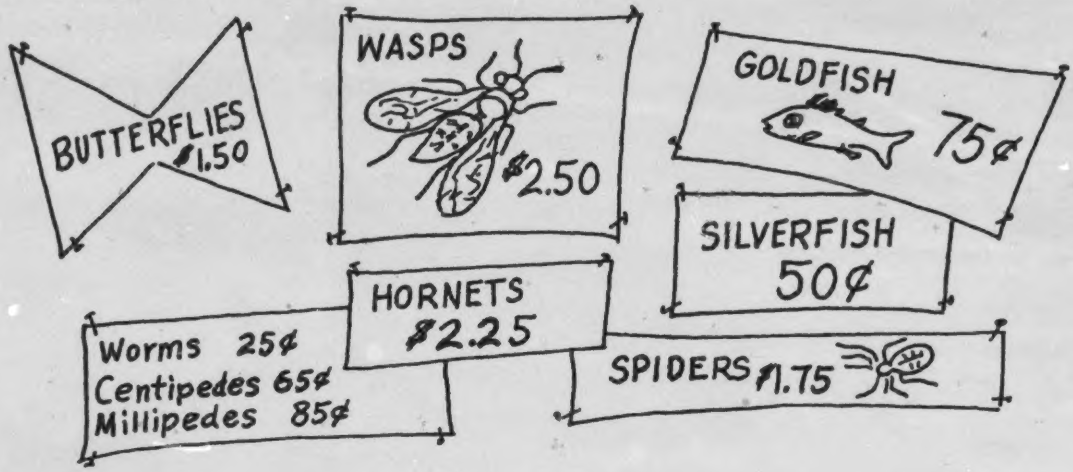
The REACT page presents a few math exercises in an imaginary sales context. Many more similar questions and problems may be devised by teacher or pupils.

CB/Level 6/2

"Strange Pet Store"

STRANGE PET STORE

Suppose you were a clerk in this Strange Pet Store.


BUTTERFLIES $1.50
WASPS $2.50
GOLDFISH 75¢
SILVERFISH 50¢
HORNETS $2.25
Worms 25¢
Centipedes 65¢
Millipedes 85¢
SPIDERS $1.75

If a customer wanted to spend $5.00 and bought 1 goldfish, how many worms could he also buy? ____________

How many worms could he buy if he bought 2 goldfish? ____________

How many goldfish could he buy if he bought 8 worms? ____________

If a customer returned a wasp and a butterfly, how many silverfish could he get in an even exchange? ____________

If a customer had $10.00 to spend, how many spiders could he buy? ____________

What would the change be? ____________

For $10.00 how many hornets could he buy? ____________

What would the change be? ____________

If a customer bought an equal number of centipedes and millipedes, how many of each could he get for $5.00? ____________

CLERKS OF ALL KINDS

Sixth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *distinguish between statements of observable facts and of feelings or opinions.*

Attitudes and Appreciations Dimension

. . . *cite at least two sales positions suitable for men or women.*

. . . *classify a particular number of sales behaviors according to the work settings.*

Career Information Dimension

. . . *point out possible pleasant or unpleasant features of at least one sales job.*

Educational Awareness Dimension

. . . *identify at least two facts about sales persons learned outside of school.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Discussion skills
    - Noting details
  - Writing Skills
    - Reports from research
- Social Studies
  - Economics
    - Goods and services
    - Role differentiation
    - Interdependence
    - Stores

Preplanning Suggestions

Audio-visual materials about kinds of sales people
Pictures of sales people

CLERKS OF ALL KINDS

There are effective interpersonal relations skills for giving or evaluating instructions.

Coping Behaviors

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

A great many tasks can be performed by men or women.

Attitudes and Appreciations

Career-oriented learning may take place in school or out of school.

Educational Awareness

Brainstorm with pupils on whatever ideas they have about sales persons. What kinds of places do they work? What kinds of things do they sell? What skills do they need? What rewards do they get from their work? How is selling different today than in earlier times?

. . . *distinguish between statements of observable facts and of feelings or opinions.* PPO

. . . *point out possible pleasant or unpleasant features of at least one sales job.* PPO

. . . *cite at least two sales positions suitable for men or women.* PPO

. . . *identify at least two facts about sales persons learned outside of school.* PPO

As the facts and opinions about sales people accumulate, guide the discussion toward some organization of the ideas that will provide some basis for further individual or small group study into a particular aspect of retail sales. Encourage pupils to take an interest in at least one retail sales position characterized by a specific product or work setting. (Don't forget the traveling salesman!) With the very wide variety of sales positions, almost any child should be able to find a type about which to do some research and reporting. History may be a good approach in some cases. Provide movies, filmstrips, or printed materials to help broaden horizons with respect to different kinds of sales jobs.

Most occupations include common expectations, such as punctuality, dependability, and avoidance of excessive absence.

Attitudes and Appreciations

. . . *classify a particular number of sales behaviors according to the work settings.*
PPO

The REACT page offers a checklist for tallying the activities of two different kinds of salesclerks. Help pupils to anticipate possible problems that may arise "just standing around a store." Permission from the clerks themselves would likely be obtained if they know the purpose of the observations.

Clarify tallying procedures (𝍸 11), and suggest that an equal amount of time be used for each observation. Use the results of the observations for further discussion and study, especially in terms of pupils' opinions and feelings about the various tasks of retail sales. How do different work settings affect the nature of the salesperson's job? Which activities seem appealing, or unappealing, to the children?

CB/Level 6/3

"The Work-A-Day World"

THE WORK-A-DAY WORLD

This checklist is to help you keep track of things that retail salesclerks do. Choose two different kinds of stores in which you can observe a salesperson without getting too much in the way. Make a tally mark in the proper space whenever the salesperson does that particular thing. Extra lines are provided for other behavior you may happen to see.

	Name of store Kind of store	Name of store Kind of store
Talks with customer		
Handles money		
Shows goods to customer		
Talks with other employees		
Arranges goods		

Do you think you would like to work at either of these jobs?

Why?

Share your observations and opinions with your teacher and classmates.

PINPOINT PATTERN

Sixth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *share map-making and data-gathering skills with a classmate.*

. . . *compare one's experiences of group learning and individual learning.*

Attitudes and Appreciations Dimension

. . . *relate the goods and services of at least two local retail establishments to the needs of the community.*

Career Information Dimension

. . . *explain why a particular local retail establishment is located where it is.*

Subject Matter Concepts

- Social Studies
  - Geography
    - Map keys
    - Special purpose maps
  - Sociology-Anthropology
    - Community's wants and needs
    - Community reflects assumptions and values.

- Language Arts
  - Reading
    - For information

Preplanning Suggestions

Large local map of retail areas
Telephone books or other city directories

PINPOINT PATTERN

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

Technological, economic, social, and political factors influence supply and demand of jobs.

Career Information

There are effective interpersonal relations skills for giving and evaluating instructions.

Coping Behaviors

There are effective interpersonal relations skills for giving and evaluating instructions.

Coping Behaviors

Prepare pupils for making a large map showing locations of local retail establishments by discussing the idea of retail businesses in general. Why does a particular one locate where it does? How does a community determine the businesses that it includes? Help to identify stores by types of products, services, sizes of buildings, numbers of employees, etc.

. . . *relate the goods and services of at least two local retail establishments to the needs of the community.* PPO

. . . *explain why a particular local retail establishment is located where it is.* PPO

. . . *share map-making and data-gathering skills with a classmate.* PPO

Use the yellow pages of the telephone directory as a basis for choosing which kinds of businesses to locate on the map. The extent of the map area, of course, will depend on local conditions and how far it is feasible to go. In gathering information and placing markers on the map, encourage children to help each other in deciding upon and following directions. The map pattern can be used as a basis for discussing commercial interactions and the ideas of resources and needs, supply and demand.

. . . *compare one's experiences of group learning and individual learning.* PPO

The REACT page emphasizes the distinction between group and individual reception of information. School situations are obvious examples for the front side of the page, so guide pupils to consider other situations as well. Encourage volunteers to demonstrate being the "giver" of information or directions--to a single person, a small group, or the entire class.

CB/Level 6/4

"Singular and Plural Directions"

SINGULAR AND PLURAL DIRECTIONS

Offering and receiving instructions are important skills for almost every job.

Sometimes instructions are given by one person to one other person; sometimes they are given to a group of persons.

Think back over the last week or two and try to remember being told or shown something when you were a member of a group and when you were alone.

WHAT I WAS TOLD WHEN IN A GROUP	WHERE	BY WHOM

WHAT I WAS TOLD WHEN ALONE	WHERE	BY WHOM

What difference does taking directions in a group or alone make to you?

(over)

Now think about times lately when you gave information or directions to a group of others and to just one person.

WHAT I TOLD TO A GROUP	WHERE	WHO

WHAT I TOLD TO ONE PERSON	WHERE	WHO

Do you feel different telling something to one person and to a group?

How?

RELATED MATERIALS

Behind the Scenes at the Supermarket (Film, Color, 11-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

Behind the Scenes in a Department Store (Book) Leon Harris. J. B. Lippincott Company, East Washington Square, Philadelphia, Pennsylvania 19105, 1972.

Career Mothers (Sound Filmstrip) Valiant, Inc., 237 Washington Avenue, Hackensack, New Jersey 17602, 1972.

Country Store, A (Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

How Do You Feel? (Filmstrip) Educational Reading Service, 320 Route 17, Mahwah, New Jersey 07430, 1972.

I Want to Be a Sales Clerk (Book) E. Baker. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1969.

People Who Work in Stores (Film, Color, 11-min.) Coronet Instructional Films, Coronet Building, 65 East South Water Street, Chicago, Illinois 60601, 1972.

Retail Clerk, The (Sound Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Retail Food Clerks (Sound Filmstrip) Bowmar, 622 Rodier Drive, Glendale, California 91201, 1970.

Stores in Little Town (Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

RETAIL SALESCLERKS

The success of any retail business depends largely on its salespeople. Courteous and efficient service from behind the counter or on the sales floor does much to satisfy customers and to build a store's reputation. In selling items such as furniture, electrical appliances, or some types of wearing apparel, the salesworker's primary job is to create an interest in the merchandise the store has to offer. The salesman or saleswoman may answer questions about the construction of an article, demonstrate its use, explain how it is cared for, show various models and colors, and otherwise help the customer to make a selection.

In addition to their selling duties, most retail salespeople make out sales or charge slips, receive cash payments, and give change and receipts. They also handle returns and exchanges of merchandise. Salespersons usually are responsible for keeping their work areas neat and presentable. In small stores, they may assist in ordering merchandise, stocking shelves or racks, marking price tags, taking inventories, preparing attractive merchandise displays, and promoting sales in other ways.

The largest employers of retail salesworkers are department and general merchandise, food, and apparel and accessories stores. Men predominate in stores selling furniture, household appliances, hardware, farm equipment, shoes, and lumber, and in automobile dealerships. Women outnumber men in department and general merchandise, variety, apparel and accessories, and in drugstores.

Some sales jobs are found in practically every community in the country. The vast majority of salespersons, however, work in large cities and in heavily populated suburban areas.

Newly hired sales personnel usually receive on-the-job instruction. They learn about credit and other store policies and may be given the specialized training required to sell certain products. In large stores, training programs may be more formal, and beginners usually attend training sessions for a few days.

Many stores offer opportunities for persons without a college degree to advance to executive positions. Some salespersons eventually become buyers, department managers, or store managers; others may transfer to office positions for administrative work in personnel, advertising, or other fields.

Among the major factors contributing to the anticipated rise in retail sales jobs are population and economic growth, and the resulting increase in the volume of sales. The trend for stores to remain open for longer hours, while the number of weekly hours worked by salespersons continues to decline, also will produce more need.

Salespersons in many retail stores are allowed to purchase merchandise at a discount. Some stores, especially the large ones, pay all or part of the cost of employee benefits. Some full-time salespersons work a 5-day, 40-hour week, although in many stores the standard workweek is longer. Since Saturday is a busy day in retailing, employees usually work that day and have another weekday off. Longer than normal hours may be scheduled before Christmas and during other peak periods. Some salespersons regularly work one evening a week or more, especially in suburban shopping centers.

Salespeople in retail trade usually work in clean, well-lighted places. Many stores are air conditioned. Some sales positions require work outside the store; a salesman of kitchen equipment may visit prospective customers at their homes, for example, to assist them in planning renovations, and a used-car salesman may spend much of his time working at an outdoor lot.

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 311-314.

ENVIRONMENTS FOR EFFICIENCY

SIXTH EXPERIENCE LEVEL INFUSION STRATEGY

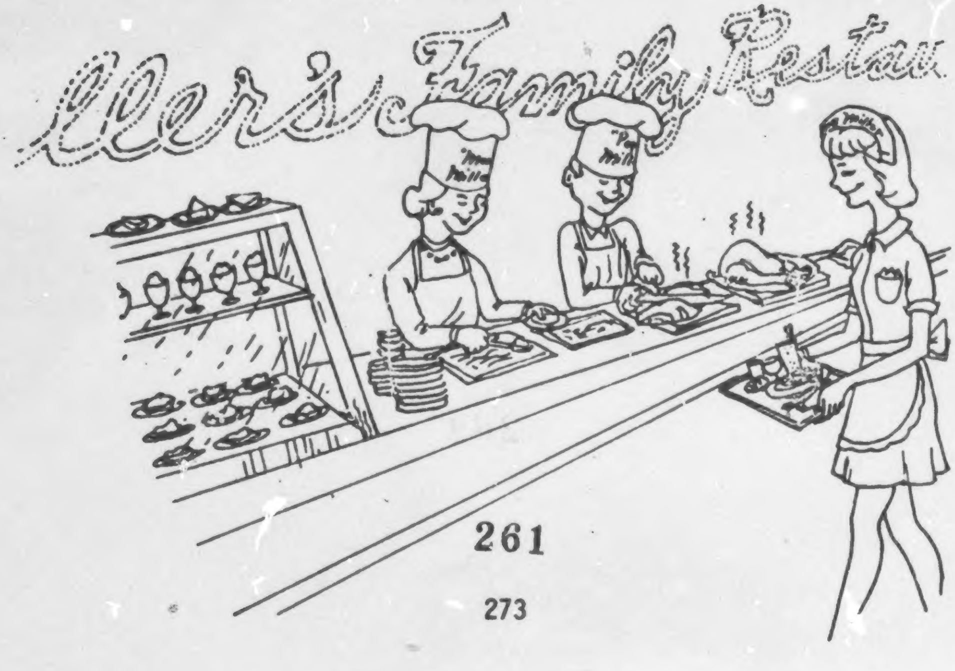
CAREER DEVELOPMENT FOCUS: There are characteristics which differentiate between jobs--both within and between occupational clusters.

OCCUPATIONAL FOCUS: Industrial Engineer

ACTIVITIES

IN THIS INFUSION STRATEGY

1. World of Engineering
2. Through the Years
3. Space and Stuff
4. Time Study



Teacher Goals

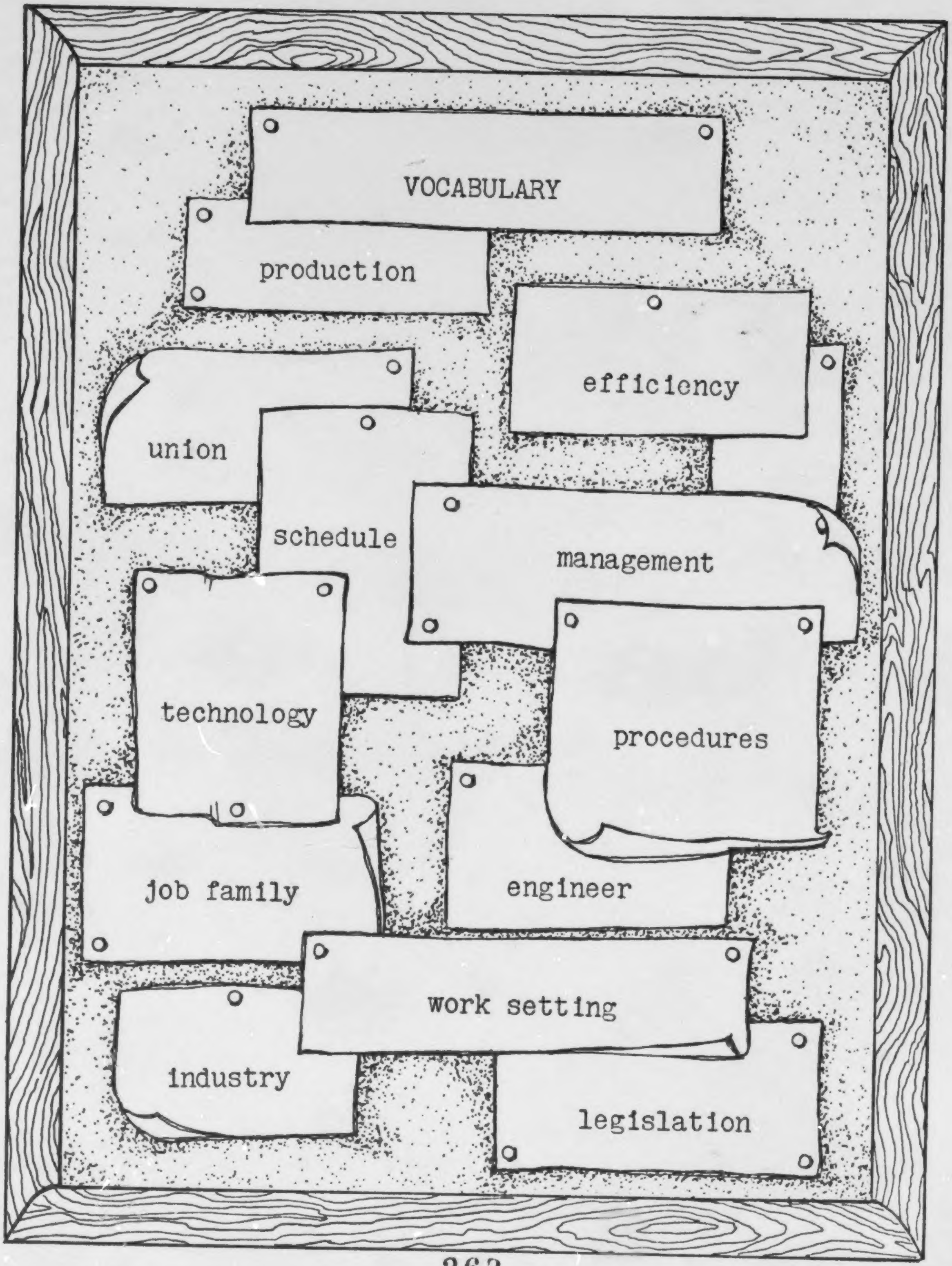
Teacher goals of this strategy combine a Coping Behaviors Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Industrial Engineer. In this perspective the teacher's goals are to:

Interest pupils in various types of occupational clusters and job families.

Encourage exploration of the field of engineering as an example of occupational grouping.

Provide opportunities for simulated activities related to industrial engineers.

Structure experiences to enhance awareness of the effects of changing working conditions.


VOCABULARY
production
efficiency
union
schedule
management
technology
procedures
job family
engineer
work setting
industry
legislation

WORLD OF ENGINEERING

Sixth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *report about knowledge and work skills required by at least three different kinds of engineers.*

. . . *discuss the criteria that typify engineering occupations.*

Attitudes and Appreciations Dimension

. . . *discuss the suitability of a particular field of engineering for both men and women.*

Career Information Dimension

. . . *describe the differences between at least two different engineering work settings.*

. . . *explain probable geographical reasons why a particular engineering activity is located where it is.*

. . . *classify a given number of occupations according to a specified number of skill requirements.*

Educational Awareness Dimension

. . . *describe a specific engineering job as an example of continuing learning.*

Subject Matter Concepts

- Social Studies
  - Economics
    - Goods and services
    - Division of labor
    - Uses of environments
    - Supply and demand
  - Political Science
    - Authority structures
    - Rules for interaction
    - Community rights and requirements

- Language Arts
  - Reading
    - For information
    - Reference sources

Preplanning Suggestions

Encyclopedias, audio-visuals, books to identify types of engineers and their needed skills
Industrial engineer to interview

This activity is geared to distinguish the industrial engineer from other kinds of engineers. Help pupils to identify the industrial engineer as one who seeks effective use of equipment, materials, and people. Most other types of engineers deal more directly with the creation and production of equipment and facilities.

Brainstorm from the term "engineer." Find out what ideas the children already have besides the normally expected awareness of locomotive engineers.

There are characteristics which differentiate between jobs--both within and between occupational clusters.

Coping Behaviors

> . . . *report about knowledge and work skills required by at least three different kinds of engineers.* PPO

Lead children toward an understanding of engineering as a field that includes many types of work. Engineers may be labeled as civil, electrical, chemical, mechanical, military, etc. Their common concern is efficient application of the basic factors of production--manpower, machines, materials.

Occupations have their own work settings.

Career Information

> . . . *describe the differences between at least two different engineering work settings.* PPO

Technological, economic, social, and political factors influence supply and demand of jobs.

Career Information

> . . . *explain probable geographcal reasons why a particular engineering activity is located where it is.* PPO

Use audio-visual aids, encyclopedias, or other printed materials to increase knowledge about different types of engineering. Discuss similarities that help to group these types into a single job family.

Further information may be secured by inviting two or more different kinds of engineers to visit the classroom and discuss their respective jobs with the children.

In any case, zero in on the work of the industrial engineer as distinguished from the others. Identify his work settings, typical job expectations, educational preparation, etc.

Learning is a lifelong process.

Educational Awareness

. . . describe a specific engineering job as an example of continuing learning. PPO

A great many tasks can be performed by men or women.

Attitudes and Appreciations

. . . discuss the suitability of a particular field of engineering for both men and women. PPO

The study of engineering tasks can be a good opportunity to illustrate the idea of learning as a continuing process during one's adult life. Expectations for employment for women in any engineering speciality is also an important consideration.

There are characteristics which differentiate between jobs--both within and between occupational clusters.

Coping Behaviors

. . . discuss the criteria that typify engineering occupations. PPO

Pupils may be assigned to present reports to the class or take part in a panel discussion of engineering, in general, or industrial engineering, in particular.

Occupations require special personal characteristics.

Career Information

. . . classify a given number of occupations according to a specified number of skill requirements. PPO

The REACT page presents a checklist in the form of a grid. The pupil is to identify certain abilities as being normal job expectations in certain occupations. (Make sure that all pupils understand how to use a grid as a checklist.) The last line on the grid is for the pupil's self evaluation with respect to the same abilities.

CB/Level 6/5

"What It Takes To Be"

WHAT IT TAKES TO BE

Listed below are ten occupations with which you are probably familiar.

Along the top of the grid are some abilities that may or may not be related to each of the occupations. Check the boxes in the grid according to which abilities you think go with each occupation.

The last line is for you to check which of those abilities you have.

	Writing Skills	Math Skills	Science Knowledge	Work With People	Work Alone	Physically Active	Sit Most of Time	Work Indoors	Work Outdoors	Use Machines
Librarian										
Locomotive Engineer										
Grocer										
Deep-Sea Diver										
Bank Teller										
Carpenter										
Newspaper Reporter										
Telephone Operator										
Teacher										
Plumber										
YOURSELF										

Which occupations have the same check marks as yourself?

What other occupations can you think of that would probably have the same check marks?

THROUGH THE YEARS

Sixth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *compare the working conditions from at least two different historical phases in a given industry.*

Attitudes and Appreciations Dimension

. . . *describe how certain policies and procedures may change over a period of time for a given occupation.*

Career Information Dimension

. . . *tell about a tool or machine devised specifically to improve efficiency in a particular industry.*

Educational Awareness Dimension

. . . *explain how changes in technology and social intelligence affected production techniques in a given industry.*

Subject Matter Concepts

- Social Studies
  - History
    - Industrial Revolution
    - Rate of change
    - Relation of geography and history
    - Modern life has roots in past.
  - Economics
    - Labor unions
    - Governmental regulations
    - Production of goods and services
    - Labor systems
- Language Arts
  - Reading
    - For information
    - Making inferences

Preplanning Suggestions

Information about changes in occupations
Encyclopedias
Films

THROUGH THE YEARS

There are characteristics which differentiate between jobs--both within and between occupational clusters.

Coping Behaviors

Learning is a lifelong process.

Educational Awareness

A given work setting requires certain policies and procedures.

Attitudes and Appreciations

Occupations require the use of specific materials and equipment.

Career Information

Modern means of production are the results of various historical developments. How far back a particular industry goes, of course, depends upon a great many variables.

The purpose of this activity is to search into the history of types of products with particular emphasis on improvements in working conditions, equipment, and use of personnel.

> . . . *compare the working conditions from at least two different historical phases in a given industry.* PPO

Using interests of pupils and/or availability of materials as a basis, choose one kind of product for an in-depth study of the historical development of means of production. If time and conditions permit, of course, further topics may be pursued.

> . . . *explain how changes in technology and social intelligence affected production techniques in a given industry.* PPO
>
> . . . *describe how certain policies and procedures may change over a period of time for a given occupation.* PPO
>
> . . . *tell about a tool or machine devised specifically to improve efficiency in a particular industry.* PPO

Possible topics of study could be:

> The factory system as developed in 18th Century England and imported into America

The development of agricultural machinery, which can go back as far as desired

The development of a particular mode of transportation from the viewpoint of changing designs and methods of production

The social legislation of both England and the United States since the early 19th Century, which sought to regulate working conditions

The creation and growth of labor unions

The methods and standards of the handicraft guilds in the Middle Ages

In any case, help children to maintain consciousness of looking for job descriptions in different periods of history and in different parts of the world. Films, filmstrips, and printed materials should be available to provide sources of information.

The REACT page gives directions for the collection, classification, and organization of pictures of people working. Help pupils clarify the idea of job groups or families. If a pupil can devise his own system of classifying, well and good. Otherwise, suggest grouping by types of products, by services, by work settings, etc.

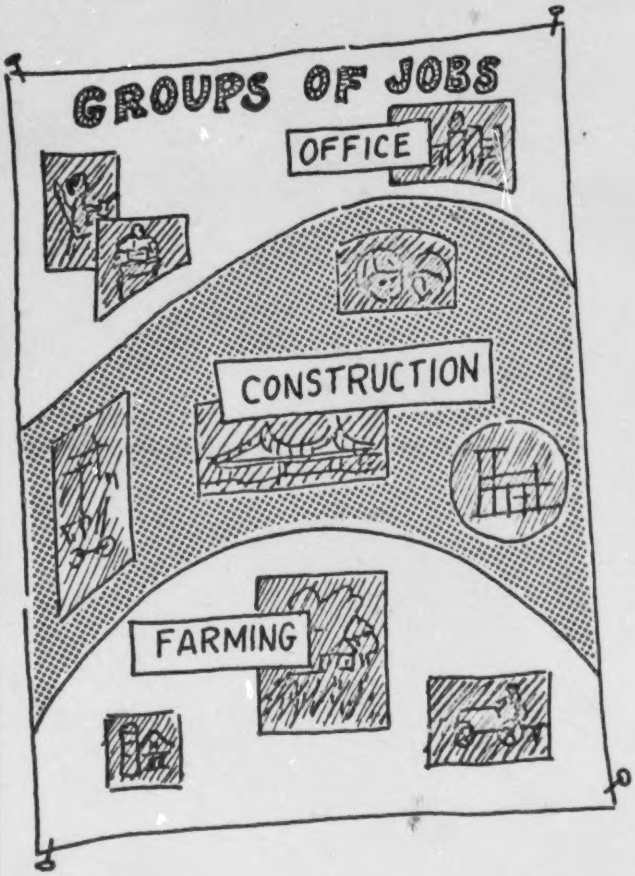
The teacher may want to add substance to the collection and organization of pictures by creating a bulletin board along the same lines as the pupils' activity.

CB/Level 6/6

"Groups of Jobs"

GROUPS OF JOBS

A good way to learn more things about more jobs is to practice grouping them into families.



From old magazines, books, and newspapers, collect a good supply of pictures of people working at different jobs. Then choose three or four groups of jobs that seem to fit together in some way.

For example:

OFFICE WORKERS
PUBLIC SERVICE OCCUPATIONS
CONSERVATIONISTS
TRANSPORTATION JOBS
COMMUNICATIONS WORKERS
ENTERTAINMENT
CONSTRUCTION WORK
FARMING
HEALTH SERVICES
SALES PEOPLE

Make a poster or scrapbook to organize your collection of pictures.

Share your extra pictures with classmates who are collecting for different groups of jobs. Perhaps they can let you have some that they have found.

SPACE AND STUFF

Sixth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *define a given number of classroom tasks according to the skills or materials required.*

Attitudes and Appreciations Dimension

. . . *discuss the feelings one has when working in a changed environment.*

. . . *describe the work of a classroom committee as a responsibility to the entire class.*

Career Information Dimension

. . . *adjust classroom furnishings to create a new work environment.*

Educational Awareness Dimension

. . . *describe how one's attitude toward a task might be affected by a change in work environment.*

Subject Matter Concepts

- Social Studies
    - Sociology-Anthropology
        - Individuals and groups are interdependent.
        - Changing conditions produce changing values.
    - Political Science
        - School rules
        - Community rights and requirements
        - Effects of common goals
- Language Arts
    - Listening and Speaking
        - Discussion skills
        - Giving and taking directions

Preplanning Suggestions

Materials to make floor plans and representative furniture in the classroom

Note to parents about making rearrangement of furniture in a room at home

SPACE AND STUFF

Occupations have their own work settings.

Career Information

Learning achievement depends upon effort and ability.

Educational Awareness

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

There are characteristics which differentiate between jobs--both within and between occupational clusters.

Coping Behaviors

Work involves the acceptance of responsibility for a task.

Attitudes and Appreciations

This activity relates to the industrial engineer's concern with utilization of space and equipment.

Divide the class into committees of about six or seven members each. The task of each committee is to prepare a plan for changing the placement, and possibly the actual use, of furniture and other materials and equipment in the classroom.

> . . . *adjust classroom furnishings to create a new work environment.* PPO
>
> . . . *describe how one's attitude toward a task might be affected by a change in work environment.* PPO
>
> . . . *discuss the feelings one has when working in a changed environment.* PPO

Discuss with the whole class the need to continue doing much of the same school work that is already being done. However, add to this the possibility of one or two additional related activities as suggested by any of the committees. Then allow each committee a part of the school day to take charge as the "industrial engineers." A diagram of a proposed floor plan for the classroom should be part of the committees' preparation.

> . . . *define a given number of classroom tasks according to the skills or materials required.* PPO
>
> . . . *describe the work of a classroom committee as a responsibility to the entire class.* PPO

The "industrial engineers" should be responsible for placing and prescribing uses for physical equipment and materials. They may also direct the "teaching" that goes on during their tenure--subject, of course, to the real teacher's judgment and guidance. "Tasks" may be classified according to subject matter or some other criteria. Some division of labor may be formulated wherein special talents and skills of individuals are utilized to best advantage for total class success.

The results of each changed environment should be evaluated with stress on differences in feelings and efficiency. What "industrial engineering" efforts help classroom work, especially for each individual's own good? What kinds of organizations or allocations are unsuitable for the purposes of the classroom?

The REACT page directs pupils to rearrange the furniture in one of the rooms at home. It might be helpful to alert parents to this activity for the sake of understanding and possible active cooperation. Emphasize keeping track of reactions of family members to changed furniture positions. What things are made more difficult? Is the difficulty a matter of familiarity or would it always be so? Why was furniture in the old positions in the first place? Were any better positions discovered as a result of this activity?

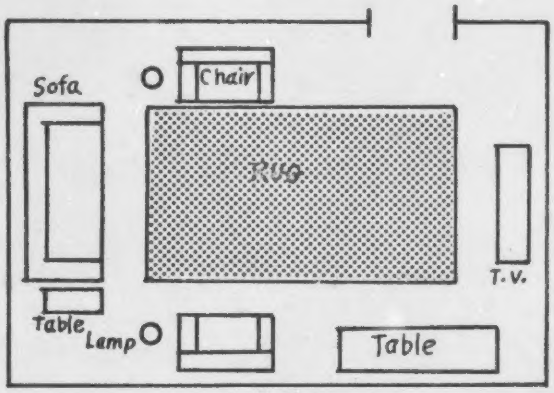
A take-off on this activity could be making dioramas of offices, stores, classrooms, playgrounds, etc.

CB/Level 6/7

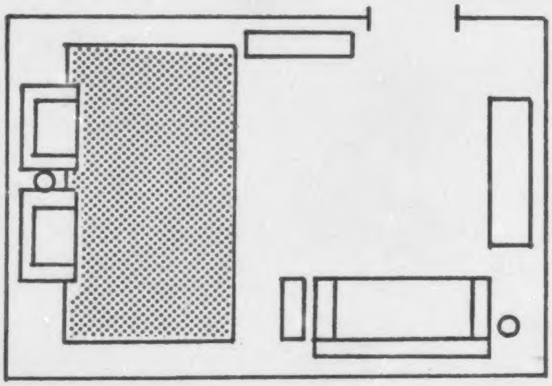
"Furniture Shuffle"

FURNITURE SHUFFLE

Ask permission from your parents to rearrange the furniture in one room of your home for a day or two. Make a diagram of how the room looked before and after your shuffling. For example:



BEFORE



AFTER

Which room did you rearrange?

How many people used the room while it was rearranged?

In what ways was the new arrangement better than before?

In what ways was the old arrangement better?

Was everything returned to its previous place?

If something stayed in the new position, what stayed and why?

TIME STUDY

Sixth Experience Level Activity

Performance Objectives

Coping Behaviors Dimension

. . . *identify at least two differences and two similarities between doing the same activities at different times.*

Attitudes and Appreciations Dimension

. . . *classify a given number of occupations according to expectations for use of time.*

Career Information Dimension

. . . *explain the element of time as a feature of the work setting in the classroom.*

. . . *distinguish the likes and dislikes of classmates concerning their own scheduling of classroom activities.*

Educational Awareness Dimension

. . . *tell of at least one instance in which a change of scheduling affected one's work efforts.*

Subject Matter Concepts

- Social Studies
  - Sociology-Anthropology
    - Changing conditions produce changing values.
    - Individuals and groups are interdependent.
  - Political Science
    - School rules
    - Community rights and requirements
    - Traditional values, beliefs
- Language Arts
  - Listening and Speaking
    - Discussion skills
    - Giving and taking directions

Preplanning Suggestions

Time schedule of classroom activities
Time schedule of all school activities which are predetermined

TIME STUDY

This activity relates to the industrial engineer's concern with efficient scheduling of time. In this activity, the regular daily schedule of classroom events is "up for grabs"--subject to responsible limitations with respect to such items as a maximum amount of time for recess, deference to school regulations regarding attendance and dismissal, and schedules maintained by special teachers.

Occupations have their own work settings.

Career Information

> *. . . explain the element of time as a feature of the work setting in the classroom.* PPO

Learning achievement depends upon effort and ability.

Educational Awareness

> *. . . tell of at least one instance in which a change of scheduling affected one's work efforts.* PPO

There are characteristics which differentiate between jobs--both within and between occupational clusters.

Coping Behaviors

> *. . . identify at least two differences and two similarities between doing the same activities at different times.* PPO

Appoint or elect committees, each of which will produce a time schedule for classroom activities. Discuss various conditions that can affect scheduling--sequence, duration of each activity, time of day, and nature of the activity. According to teacher judgment, allow each committee the responsibility for scheduling and monitoring a morning, an afternoon, or an entire school day.

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

> *. . . distinguish the likes and dislikes of classmates concerning their own scheduling of classroom activities.* PPO

Use this opportunity to depart from traditional assumptions. For example, a given subject may be treated more than once a day; a "morning regular" might be moved to the afternoon; different children may be doing different things at the same time.

In any case, stress the advantages of both constancy and trying new methods. When and how do we do things that we must do despite likes and dislikes? When and how is it reasonable to use preferences or immediate appeal as criteria for deciding upon activities? Encourage expressions of personal feelings about the effects of scheduling and rescheduling. Is it better to keep on the same schedule always? Should the schedule be changed every day, every week, or every month?

A given work setting requires certain policies and procedures.

Attitudes and Appreciations

. . . *classify a given number of occupations according to expectations for use of time.* PPO

The REACT page presents an exercise in classifying occupations according to the flexibility of scheduling on the parts of the individual workers themselves. Help children anticipate scheduling opportunities as "usually-sometimes-rarely" conditions by discussing the work experiences of their parents or other adult acquaintances. Avoid any connotation that more or less personal control over such timing is necessarily good or bad. This factor may be largely a matter of personal preference, enjoyed by some but not by others.

CB/Level 6/8

"The Time Element"

THE TIME ELEMENT

Here is a list of fifteen different occupations.

Identify each one according to how much of the time the worker is able to control his own schedule.

Use this code: U for Usually
S for Sometimes
R for Rarely

One of each kind is already done for you.

_____ fireman
_____ carpenter
_____ secretary
_____ accountant
__U__ author
__S__ teacher
_____ farmer
__R__ bus driver
_____ cashier
_____ waiter
_____ soldier
_____ janitor
_____ cook
_____ policeman
_____ mailman

- -

Now list some other occupations that you think would fit under each heading.

USUALLY	SOMETIMES	RARELY
______________	______________	______________
______________	______________	______________
______________	______________	______________
______________	______________	______________

What advantages would there be in being given a schedule to follow?

What advantages would there be in making up your own schedule of work?

How much of your work time would you like to control when you have a job?

RELATED MATERIALS

Behind the Scenes in a Car Factory (Book) Leon Harris. J.B. Lippincott, East Washington Square, Philadelphia, Pennsylvania 19105, 1972.

Business Organization (Sound Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Captains of Industry (Book) Bernard Weisberger. Harper and Row, Scranton, Pennsylvania 18512, 1971.

Factors of Production: What Do We Need to Get Work Done? (Sound Filmstrip) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1972.

Getting Along With Others (Filmstrip) McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, New York 10020, 1970.

How Industry Began (Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Major Industries Today (Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

New Fields (Book) Chester Thompson. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1971.

Problems and Attitudes in School (Film, Color, 9-min.) Henk Newenhouse, 1825 Willow Road, Northfield, Illinois 60093, 1970.

So You Want to Go into Industry (Book) Edward Hodnett. Harper and Row, Scranton, Pennsylvania 18512, 1971.

INDUSTRIAL ENGINEERS

Industrial engineers determine the most effective methods of using the basic factors of production--manpower, machines, and materials. They are concerned with people and "things," in contrast to engineers in other specialties who generally are concerned more with developmental work in subject fields, such as power, mechanics, structures, or materials.

They may design systems for data processing and apply operations research techniques to complex organizational, production, and related problems. Industrial engineers also develop management control systems to aid in financial planning and cost analysis; design production planning and control systems to insure coordination of activities and to control the quality of products; and may design and improve systems for the physical distribution of goods and services. Other activities of industrial engineers include plant location surveys, where consideration is given to sources of raw materials, availability of a work force, financing, and taxes; and the development of wage and salary administration and job evaluation programs.

More than two-thirds of the estimated 120,000 industrial engineers employed in early 1968 were in manufacturing industries. They were more widely distributed among manufacturing industries than were those in other branches of engineering. Some worked for insurance companies, construction and mining firms, and public utilities. Others were employed by retail organizations and other large business enterprises to improve operating efficiency. Still others worked for government agencies and educational institutions. A few were independent consulting engineers.

The outlook is for continued rapid growth of employment in this branch of the profession through the 1970's. The increasing complexity of industrial operations and the expansion of automated processes, coupled with the continued growth of the nation's industries, are among the major factors expected to increase the demand for industrial engineers. Growing recognition of the importance of scientific management and safety engineering in reducing costs and increasing productivity also is expected to stimulate the demand for persons in this branch of engineering.

Besides those needed to fill new positions, additional numbers of industrial engineers will be required each year to replace those who retire and die. The number needed to fill these vacancies, estimated to be approximately 1,300 in 1968, will probably rise slowly in the future.

A bachelor's degree in engineering is the generally accepted educational requirement for entrance into engineering positions. Well-qualified graduates having training in physics, one of the other natural sciences, or in mathematics may qualify for some beginning positions in engineering. Some persons without a degree are able to become engineers after long experience in a related occupation--such as draftsmen or engineering technician--and some college level training.

Advanced training is being emphasized for an increasing number of jobs.

Graduate degrees are desirable for beginning teaching and research positions, and are helpful for advancement in most types of work. Furthermore, in some engineering specialties, such as nuclear engineering, training is generally available only at the graduate level.

Some engineering curriculums require more than 4 years to complete. Approximately 25 institutions have 5-year programs leading to the bachelor's degree. In addition, about 50 engineering schools have arrangements with liberal arts colleges whereby a student spends 3 years in the college and 2 years in the engineering school, receiving a bachelor's degree from each. This type of program usually offers the student an opportunity for greater diversification in his studies.

Some institutions have 5- or 6-year cooperative plans under which students spend alternate periods in engineering school and in employment in industry or government. Under most of these plans, classroom study is coordinated with practical industrial experience. In addition to the practical experience he gains in this type of program, the student is provided an opportunity to finance part of his education.

Engineering graduates usually begin work as trainees or as assistants to experienced engineers. Many large companies have special training programs for their beginning engineers which are designed to acquaint them with specific industrial practices. These programs are valuable in determining the type of work for which the individual is best suited. As they gain experience, engineers may move up to positions of greater responsibility. Those with proven ability are often able to advance to high-level technical and administrative positions, and increasingly large numbers are being promoted to top executive posts.

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 72-73.

A STATE OF REALLY SELLING

SIXTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS:	Previous decisions, peers, gratifications, needs, interests, and career information influence present and future decisions.
OCCUPATIONAL FOCUS:	Real Estate Salesperson

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Loan Amortization
2. Neighborhood Canvass
3. Spreading the Word
4. Title Transfer

Teacher Goals

Teacher goals of this strategy combine a Decision Making Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Real Estate Salesman. In this perspective the teacher's goals are to:

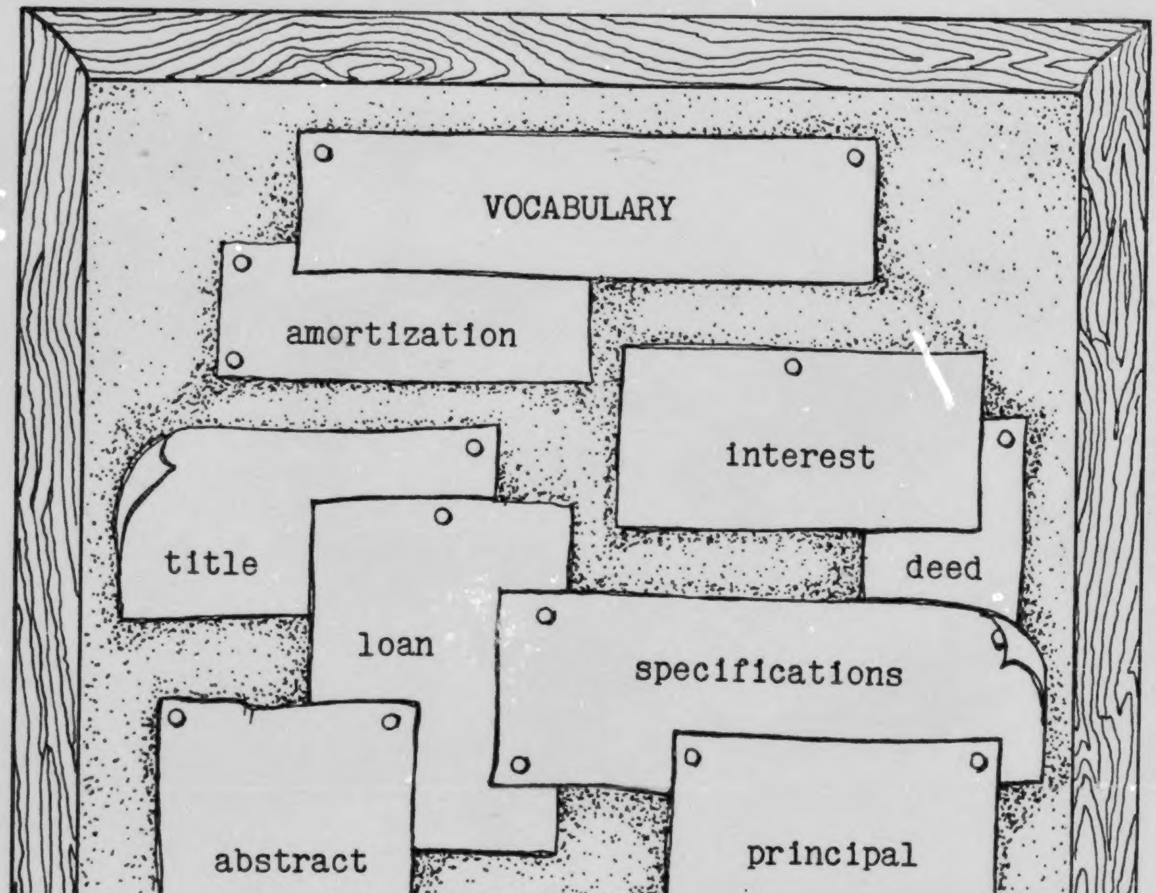
Provide pupils with some idea of the real estate salesman's role in the complexities of property transfer.

Help pupils apply their academic skills to activities related to the real estate business.

Make children aware of modes of property transfer of other times and places.

Help children to consider how values, knowledge, and attitudes contribute to choices in housing.

Encourage appreciation of how other people use knowledge and values as bases for decisions.


VOCABULARY
amortization
interest
title
deed
loan
specifications
abstract
principal
appraisal
real property
lease
mortgage

LOAN AMORTIZATION

Sixth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *describe at least two external considerations affecting a decision by a character in a skit.*

. . . *infer at least one value assumption underlying a decision by a character in a skit.*

Attitudes and Appreciations Dimension

. . . *identify a particular contribution made to society by a real estate salesman.*

. . . *describe how the negotiation for a loan requires the support of all concerned.*

Career Information Dimension

. . . *use terms from the real estate business properly in conversation.*

Educational Awareness Dimension

. . . *identify academic skills used by a real estate salesman in his work.*

Subject Matter Concepts

- Mathematics
  - Problem Solving
    - Multiple-step problems
  - Facts and Operations
    - Percents
  - Figural
    - Tables of data
- Language Arts
  - Listening and Speaking
    - Playing roles with dialogue

Preplanning Suggestions

Secure a mortgage guidé, a realty blue book, loan repayment schedules. (Contact a local realtor or banker.)
Contact a real estate salesman as a resource person or as a person to be interviewed by the class.
Dictionary

LOAN AMORTIZATION

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Occupations have their own vocabularies.

Career Information

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

A given work setting requires certain policies and procedures.

Attitudes and Appreciations

Previous decisions, peers, gratifications, needs, interests, and career information influence present and future decisions.

Decision Making

To introduce the basic ideas of securing and paying back a loan, help three children prepare a short skit depicting a discussion among a real estate salesman, a loan company representative, and a prospective house buyer. Secure ahead of time a mortgage guide, a realty bluebook, or some other systematized compilation of loan repayment schedules. (A simplified pair of tables appears on the REACT page for this activity.)

. . . *identify academic skills used by a real estate salesman in his work.* PPO

. . . *use terms from the real estate business properly in conversation.* PPO

Clarify the large mathematical concepts of principal, interest, and rate. From the repayment schedules, the role players will need to be able to find the monthly payment required for a given number of years, for a given rate of interest, for a given principal. These terms and their uses should be clarified for the audience.

. . . *identify a particular contribution made to society by a real estate salesman.* PPO

. . . *describe how the negotiation for a loan requires the support of all concerned.* PPO

. . . *describe at least two external considerations affecting a decision by a character in a skit.* PPO

The content of the dialogue can revolve around the appraised value of the house as determined by the loan company, the amount of the down payment available to the buyer, and the salary expectations of the buyer. Use the chalkboard to illustrate the amounts and operations discussed. In general, the real estate salesman should take part as a mediator and explainer--helping the buyer to understand the conditions of the loan and the loan official to be aware of the status and needs of the buyer. All these elements ought to be clarified as forces that can and do influence these kinds of decisions.

Previous decisions, peers, gratifications, needs, interests, and career information influence present and future decisions.

Decision Making

> . . . *infer at least one value assumption underlying a decision by a character in a skit.* PPO

The skit may end with a definite decision for a specific loan or may "stop" to allow the class to consider possible decisions together. In either case, discuss the needs and wants of the buyer and the values they imply which would affect the decision. The loan official must also make a decision. What values and external conditions affect that person? How does the role of the real estate salesman affect both of the others?

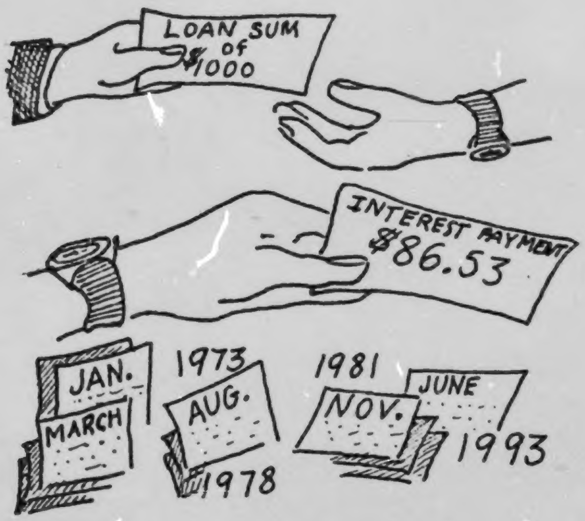
The REACT page which follows includes two simplified tables of loan amortization payments and several questions related to the tables. Many children will probably need more introductory practice with the tables and the interrelationships of the ideas of principal, interest, time, and monthly payments. This kind of material offers opportunity for illustrating the economic factor in decision making--e.g., the balancing of lower monthly payments against larger total interest expense or paying more at first to reduce the principal and subsequent interest expense. Interest expense, for these purposes, is how much more the borrower finally pays back in addition to the original principal. Thus, subtract the original principal from the total repayment cost (amount of each monthly payment times the number of months). Children will very likely need practice with simple numbers to gain confidence in dealing with this interest expense calculation.

DM/Level 6/1

"Interest Expense"

INTEREST EXPENSE

Borrowing money involves three main ideas:



(1) The Principal, which is the amount borrowed.

(2) The Interest, which is what you pay for the use of the money.

(3) The Time, which describes how long the money is loaned for.

Most loans are repaid in regular amounts each month. The size of these monthly payments is normally available in tables.

Here is an example of a table of monthly payments, determined by a 7% rate of interest:

MONTHLY PAYMENTS AT 7%

Principal	1 year	10 years	15 years	20 years	25 years
$ 1,000	86.53	11.62	8.99	7.76	7.07
2,000	173.06	23.23	17.98	15.51	14.14
10,000	865.27	116.11	89.89	77.53	70.63
15,000	1297.91	174.17	134.83	116.30	106.02
20,000	1730.54	232.22	179.77	155.06	141.36

Thus, if you borrowed $2,000 for 15 years at 7% interest, you would be expected to pay back $17.98 each month.

How many months are there in 15 years? ____________________

If you paid $17.98 for that many months, what would be the total amount you would pay? ____________________

How much more is that total amount than the original $2,000 that you borrowed? (This is the total interest expense.) ____________________

On the other side of this paper is a table of monthly payments for similar loans at a 6% rate of interest.

MONTHLY PAYMENTS AT 6%

Principal	1 year	10 years	15 years	20 years	25 years
$ 1,000	86,07	11.11	8.44	7.17	6.45
2,000	172.14	22.21	16.88	14.33	12.89
10,000	860.67	111.03	84.39	71.65	64.44
15,000	1291.00	166.54	126.58	107.47	96.65
20,000	1721.33	222.05	168.78	143.29	128.87

At 6% interest, what is the monthly payment for a loan of $2,000 for 10 years? ______________

How much less is this than the monthly payment for the same loan, for the same time, at 7% interest? ______________

What is the total interest expense for a loan of $15,000 for 15 years at 6% interest? Use these steps:

How many months are there in 15 years? ______________

What would be the total amount paid in that many months? ______________

How much more is that total amount than the original amount borrowed? ______________

What is the total interest expense for a loan of $15,000 for 15 years at 7% interest? ______________

How much more is this than the total interest expense for the same loan at 6% which you figured just before? ______________

What is the total interest expense for a loan of $20,000 for 20 years at 6% interest? ______________

What is the total interest expense for a loan of $20,000 for 25 years at 6% interest? ______________

How much more does the 25-year loan cost than the one for 20 years? ______________

How could the rates of interest, or the lengths of time for repayment, help a borrower to decide how much to borrow and for how long?

NEIGHBORHOOD CANVASS

Sixth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . describe at least two reasons given by a neighbor for his choice of present housing.

Career Information Dimension

. . . relate a school activity to competence in real estate sales.

Educational Awareness Dimension

. . . identify specific facts about housing that one has learned outside of school.

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Interviewing
    - Reporting
- Social Studies
  - Sociology-Anthropology
    - Housing
    - Values and purposes in behavior
- Mathematics
  - Problem Solving
    - Averages

Preplanning Suggestions

Prepare for children to be out of the school building for interviews or plan to invite several people into the room for interviews about their home selection. (See REACT pages.)

NEIGHBORHOOD CANVASS

Career development includes progression through stages of educational and occupational training.

Career Information

Career-oriented learning may take place in school or out of school.

Educational Awareness

Previous decisions, peers, gratifications, needs, interests, and career information influence present and future decisions.

Decision Making

Discuss with children the things they like most about their own houses (or apartments, etc.) and what they might especially look for if they were going to move. Use this momentum to prepare them to interview neighbors concerning the reasons for their choices of housing.

. . . *relate a school activity to competence in real estate sales.* PPO

Help pupils realize that a real estate salesman needs to know the kinds of things that different people look for when they are shopping for housing. Securing and storing information about these considerations can be helpful as the salesman anticipates supply and demand.

The children should prepare carefully the questions they will ask their neighbors, how to explain why they are interviewing, and how to record and report the results. Keep the ideas few and reasonably simple, but be sure that reasons for neighbors' choices are included.

. . . *identify specific facts about housing that one has learned outside of school.* PPO

. . . *describe at least two reasons given by a neighbor for his choice of present housing.* PPO

As reports are being prepared or given, help pupils concentrate on identifying people's reasons as examples of interests, values, needs, previous decisions, or opinions of others.

The REACT page provides a similar neighborhood contact activity, which considers the mobility of population. Help pupils appreciate the real estate agency's interest in the frequency of "coming and going." Both the purposes for choice of location and frequency of moving may also be applied to local business establishments.

DM/Level 6/2

"Coming and Going"

COMING AND GOING

The real estate salesman has a great interest in how often people move into and out of their homes. One way to get an idea of this moving is to ask residents how long they have lived in their present home.

Choose a series of ten or twelve homes in or near your neighborhood, from which to gather such information. (These homes might be houses, apartments, or mobile homes.) In each case, introduce yourself, and request permission to ask two questions about their home:

1. Do you rent or own your home?
2. How long have you lived here?

USE THE CHART ON THE OTHER SIDE OF THIS PAPER TO KEEP A RECORD OF THE RESPONSES TO THESE QUESTIONS.

As you share your information with classmates, compare such things as:

. . . the average length of time people stay in each neighborhood.

. . . the number of owners and the number of renters.

. . . lengths of time that owners stay and that renters stay.

ADDRESS	OWN	RENT	NUMBER OF YEARS

SPREADING THE WORD

Sixth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . describe the effects of one's own knowledge or attitudes upon a preference for a particular house.

Attitudes and Appreciations Dimension

. . . relate the services of real estate agents to the needs of at least two other parts of society.

Career Information Dimension

. . . identify a medium of communication used regularly by real estate salesmen.

Educational Awareness Dimension

. . . cite specific knowledge about housing acquired by means other than direct instruction.

Subject Matter Concepts

- Language Arts
  - Reading
    - Making inferences
  - Writing Skills
    - Advertisements
- Mathematics
  - Figural
    - Scale drawing
  - Measurement
    - Area

Preplanning Suggestions

- Enlargements of "For Sale" columns from newspapers
- Accumulate several "For Sale" columns from local newspapers
- Supplies for children's notebooks of "For Sale" advertisements
- Rulers and supplies for making scale drawings of floor plans
- Blueprints or floor plans of homes from magazines or local realtors

SPREADING THE WORD

Occupations require the use of specific materials and equipment.

Career Information

Career-oriented learning may take place in school or out of school.

Educational Awareness

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

Copy onto the chalkboard, or an overhead transparency, two or three advertisements from the "Houses for Sale" section of a local newspaper. Discuss what features are listed and what other information is included.

> . . . *identify a medium of communication used regularly by real estate salesmen.* PPO
>
> . . . *cite specific knowledge about housing acquired by means other than direct instruction.* PPO

Use this discussion to introduce the idea of collecting such "Houses for Sale" ads for several consecutive days in order to make a more comprehensive study of their contents and implications. Help children anticipate how they might keep their collections organized and usable. The teacher may want to maintain a bulletin board as an example while each pupil compiles a notebook.

As the ads are accumulating, elicit observations from the children concerning such topics as what usually comes first in an ad, what percentage tells something about price, what abbreviations are used, how many give an exact location, what information seems to be missing in some cases, and how long a particular ad runs. Distinguish also between ads placed by private individuals and by real estate agencies.

> . . . *relate the services of real estate agents to the needs of at least two other parts of society.* PPO

Previous decisions, peers, gratifications, needs, interests, and career information influence present and future decisions.

Decision Making

. . . *describe the effects of one's own knowledge or attitudes upon a preference for a particular house.* PPO

Lead pupils to realize that these ads represent a means of income to the newspapers as well as services to prospective buyers and sellers. As a culminating activity, encourage each child to choose an ad which presents a house that seems especially appealing and to report on why its particular features are attractive. Another possibility is to have pupils make up ads describing their own homes or their "dream" homes.

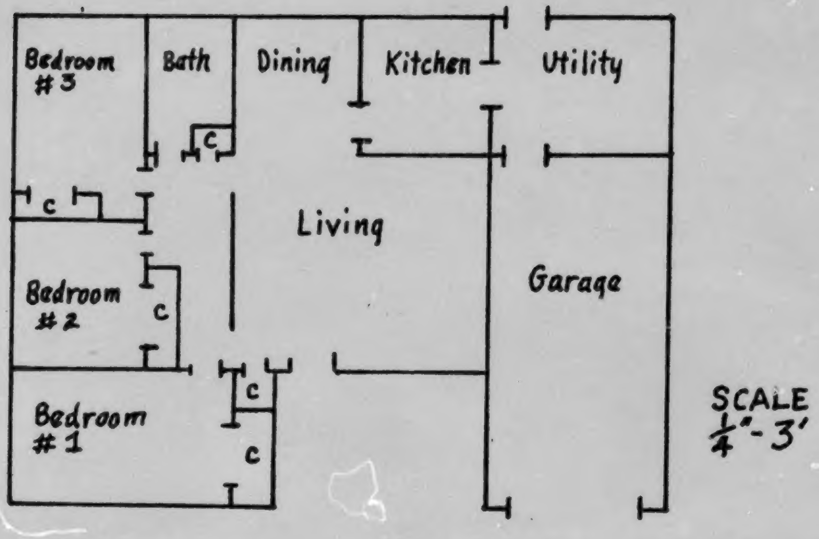
This activity may be expanded to study how people in other occupations use the classified ads to publicize their goods and services.

The content of house-for-sale ads is given a visual form in the REACT page. Be sure the idea of scale drawing is reasonably well established before distributing the page. Meanwhile, help pupils relate the ideas of values, needs, and choice to housing accommodations.

DM/Level 6/3

"Specifications Sheet"

SPECIFICATIONS SHEET


Bedroom #3
Bath
Dining
Kitchen
Utility
C
C
Living
Bedroom #2
C
Garage
C
Bedroom #1
C
SCALE
¼"-3'

This floor plan for a 3-bedroom house is described on the simplified version of a realtor's specifications sheet below. Make sure you understand how the floor plan and the "specs" sheet are related. (The heating and special features descriptions do not show on the floor plan.)

LIVING	15 x 18	BEDROOM 1	9 x 15	UTILITY	9 x 12
DINING	9 x 9	BEDROOM 2	9 x 10½	BASEMENT	None
KITCHEN	9 x 9	BEDROOM 3	9 x 12	GARAGE	12 x 24
CLOSETS	5	SPECIAL FEATURES Water Softener Aluminum Siding			
HEATING	Gas, Forced Air				

Look for floor plans and descriptions in magazines about homes or building construction for more different ideas about house designs. On the other side of this paper invent a floor plan of your own and fill in the specifications that help to describe it.

LIVING	BEDROOM 1	UTILITY
DINING	BEDROOM 2	BASEMENT
KITCHEN	BEDROOM 3	GARAGE
CLOSETS	SPECIAL FEATURES	
HEATING		

TITLE TRANSFER

Sixth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *describe how at least two external conditions influenced an historical decision about the transfer of land.*

Career Information Dimension

. . . *explain probable geographical reasons why a particular property would change hands.*

Subject Matter Concepts

- Social Studies
  - History
    - Modern life has roots in the past.
  - Economics
    - Competition for resources
  - Political Science
    - Rules for interaction
  - Sociology-Anthropology
    - Individual characteristics
    - Values and purposes in behavior

Preplanning Suggestions

Audio-visuals for land transfers in history

Actual copies of titles, deeds, etc., from courthouse or local abstract or real estate office

TITLE TRANSFER

Technological, economic, social, and political factors influence supply and demand of jobs.

Career Information

Previous decisions, peers, gratifications, needs, interests, and career information influence present and future decisions.

Decision Making

Use films, filmstrips, and/or printed materials to provide information on historical treaties with Indians and/or other land transfers between individuals or groups. Discuss the circumstances that influenced both parties to decide to "buy" and "sell."

> . . . *explain probably geographical reasons why a particular property would change hands.* PPO
>
> . . . *describe how at least two external conditions influenced an historical decision about the transfer of land.* PPO

This study can be expanded into other places and periods in history to illustrate various ways and means of transferring control of property (e.g., medieval fiefs, colonization of the New World, acquisition of Roman provinces, the Gadsden Purchase, the Panama Canal Zone). Use the continuing ideas of value assumptions and external circumstances to maintain an organizing principle for the study, which could take eventual form as skits or individual or group reports.

The complications of title transfer represent one aspect of the job description for a real estate salesman. The following REACT page aims to help the pupil relate one's own ideas about the real estate salesman's job to one's own ideas about oneself. Some preparatory discussion about the listed task descriptions would be helpful to pupils' thinking.

DM/Level 6/4

"Interest Inventory"

INTEREST INVENTORY

This checklist contains several things that a worker might do while he carries out his job. Check each item YES or NO, with an "X," depending on whether or not you think it describes a real estate salesman's work.

HE IS ABLE TO:	YES	NO
make his own plans for the day		
read a great deal while working		
use different kinds of tools		
work alone most of the time		
fix things		
use arithmetic		
work outdoors most of the time		
do many different things during the day		
work with animals		
handle money		
travel out of town		
wear a uniform		
follow a regular schedule		
meet many different people		
get a great deal of physical exercise		

APPOINTMENTS
9:00
10:00
11:00
NOTES

After you have checked each item with an "X," for the real estate salesman's job, check each item again--this time with an "O," depending on whether or not it describes what you like to do.

For which items do you find each of these marks?

X	O	O	X	Ⓧ			Ⓧ

What does each of these marks tell you about yourself and the job of real estate salesman?

RELATED MATERIALS

Credit Counselors (Sound Filmstrip) Bowmar, 622 Rodier Drive, Glendale, California 91201, 1970.

Deciding: A Leader's Guide (Teacher Manual) H. B. Gelatt, Barbara Varenhorst, Richard Carey. College Entrance Examination Board, Box 592, Princeton, New Jersey 08540, 1972.

Don't Stop Me Now (Book) Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1971.

Everyday Courtesy (Film, Color, 11-min.) Coronet Instructional Films, Coronet Building, 65 East South Water Street, Chicago, Illinois 60601, 1967.

How to Hold Your Job (Textbook) Stanley Fudell and John N. Peck. Steck-Vaughn, P. O. Box 2028, Vaughn Building, Austin, Texas 78767, 1970.

Real Estate Appraisers (Sound Filmstrip) Bowmar, 622 Rodier Drive, Glendale, California 91201, 1970.

Real Estate Management (Sound Filmstrip) Bowmar, 622 Rodier Drive, Glendale, California 91201, 1970.

Saving and Lending: Banks--What Do They Do With Our Money? (Sound Filmstrip) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1972.

Would You Like to Sell? (Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

REAL ESTATE SALESMEN

Real estate salesmen and brokers are at the center of most property transactions. They represent property owners who want to sell and find potential buyers for residential and commercial properties.

Salesmen are employed by brokers to show and sell real estate; some handle rental properties. Brokers are independent businessmen who not only sell real estate but sometimes rent and manage properties, make appraisals, arrange for loans to finance purchases, and develop new building projects. In addition, brokers manage their offices, advertise properties, and do other things necessary to operate their businesses. Some who possess the necessary qualifications combine other work, such as selling insurance or practicing law, with their real estate businesses. Most real estate salesmen and brokers sell residential property and sometimes specialize in homes within a certain price range or in a particular area of the city. A few, usually those in large real estate firms, specialize in commercial, industrial, or other types of real estate. Each specialty requires knowledge of and experience in the particular type of property. For example, salesmen who specialize in commercial sales or leasing must understand leasing practices, business trends, and location needs. Salesmen selling or leasing industrial properties must be able to supply information on transportation, utilities, and labor supply. Salesmen who handle farm properties must have considerable knowledge of soil types, water supply, drainage, and transportation facilities. One of a salesman's most important duties is obtaining "listings" (getting owners to place properties for sale with the firm). A salesman spends much time on the telephone to seek such listings and answer inquiries about properties. He obtains leads for listing through advertising and personal contact.

Because a real estate purchase is a large investment, most people buy only after careful investigation and deliberation. A real estate salesman must therefore spend much time away from his office showing and discussing properties with prospective buyers. When a number of houses are for sale in a new development, the salesman may operate from a model home. He explains special features which will meet particular needs of the prospective buyer (or renter) such as location of schools, churches, parks, stores; neighbors; community facilities; mortgage possibilities; water supply; rubbish disposal; and public transportation facilities. With a businessman, he may discuss the income potential of the property and answer questions about zoning, transportation, and community facilities. He also must be familiar with tax rates and insurance needs. It is important that he try to meet the buyer's needs and preferences and, at the same time, follow the seller's instructions. When bargaining on price is necessary, the salesman or broker must be a skillful negotiator who considers both the buyer's and the seller's interests. In the closing stages of the sale, the real estate salesman or broker often arranges for a loan, a title search, and the meeting at which details of the transaction are agreed upon and the new owner takes possession of the property.

Real estate salesmen and brokers usually spend some of their time checking listings of properties for sale or rent and making telephone calls to prospective clients. They also may answer telephone inquiries about properties, arrange appointments to show real estate, and keep records of properties listed, shown, sold, or rented.

SEARCH AND SOLVE

SIXTH EXPERIENCE LEVEL INFUSION STRATEGY

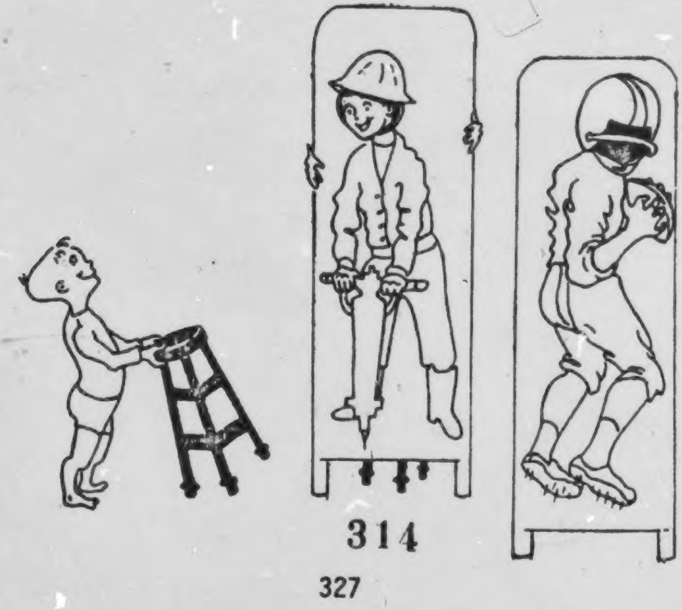
CAREER DEVELOPMENT FOCUS: The decision-making process can be used to determine one's preferences between various job families at that point in time.

OCCUPATIONAL FOCUS: Detective

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Perception Practice
2. Interview
3. The Detective Story
4. Tools of the Trade



Teacher Goals

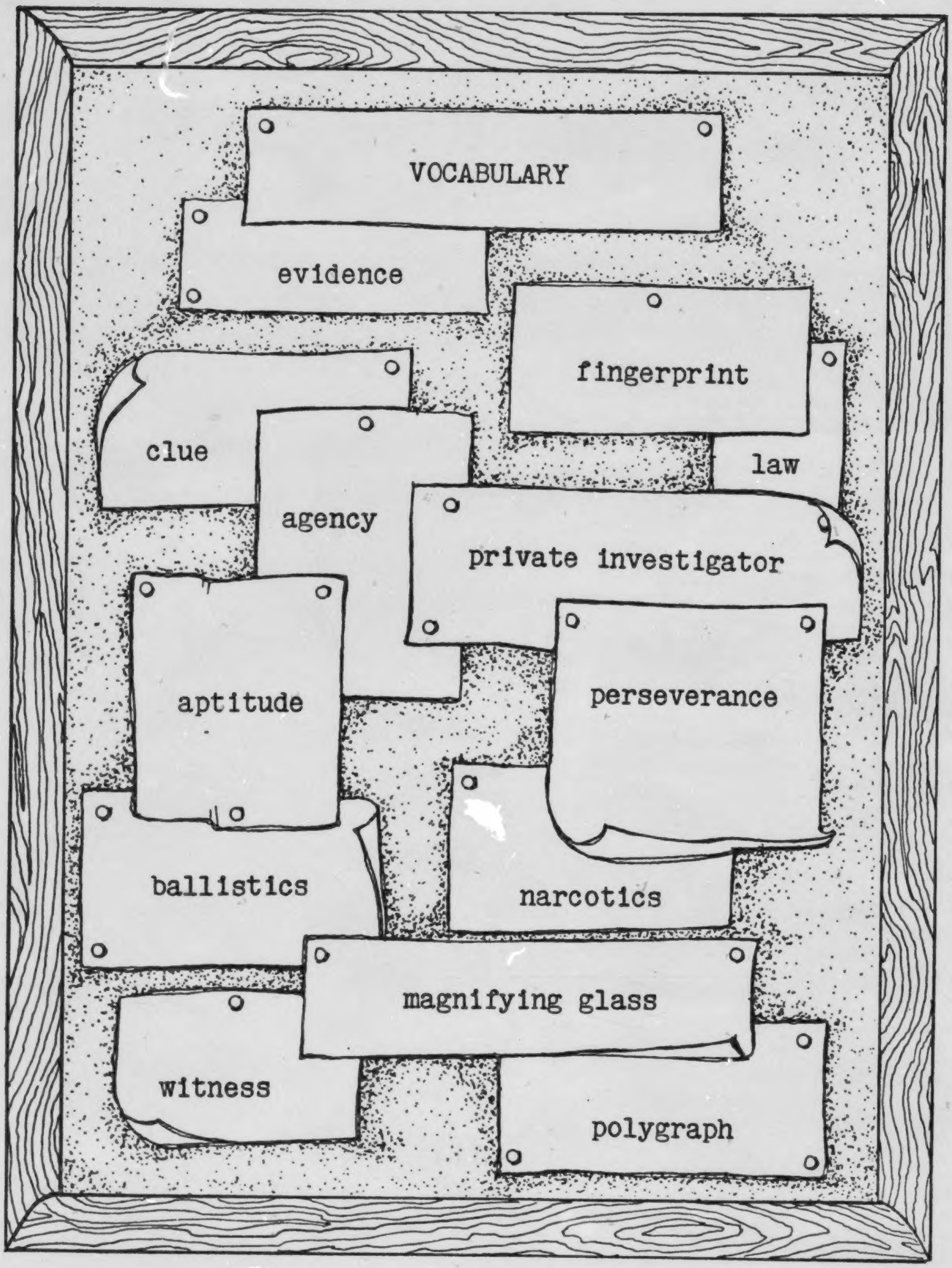
Teacher goals of this strategy combine a Decision Making Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Detective. In this perspective the teacher's goals are to:

Relate the work of the detective to more general career considerations.

Encourage pupils to increase their own powers of observation and description.

Expand pupil knowledge of the requirements for success in investigative work.

Encourage pupils to relate their own aptitudes and interests to the expectations of investigative work.


VOCABULARY
evidence
fingerprint
clue
law
agency
private investigator
aptitude
perseverance
ballistics
narcotics
magnifying glass
witness
polygraph

PERCEPTION PRACTICE

Sixth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *explain why work involving close attention and remembering appeals, or does not appeal, to oneself.*

. . . *identify at least one occupation, other than the detective, which would require keen perceptive skills.*

Career Information Dimension

. . . *describe a specific skill needed for detective work.*

Educational Awareness Dimension

. . . *identify a classroom situation in which one might improve perception skills.*

. . . *relate one's own learning achievements to a particular job requirement of a detective.*

. . . *tell the results of deliberate effort to improve one's own perception skills.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Discussion
    - Give and take directions
  - Writing Skills
    - Descriptions

Preplanning Suggestions

Prepare an area to record children's choices of an item.
Plan to have many moveable objects in one area of the room for a week or so.

PERCEPTION PRACTICE

Occupations require special aptitudes.

Career Information

The decision-making process can be used to determine one's preferences between various job families at that point in time.

Decision Making

Learning achievement depends upon effort and ability.

Educational Awareness

Have children sit so that they cannot see what is normally the front of the room. Then give them fifteen minutes or so to write a list of as many things that are on the front wall as they can. Have them keep writing until told to stop.

. . . *describe a specific skill needed for detective work.* PPO

Return children to "normal" seating and discuss briefly the number of items they noted and the descriptive modifiers they used.

. . . *explain why work involving close attention and remembering appeals, or does not appeal, to oneself.* PPO

Bring out that the ability to notice and to describe an object clearly is essential for a detective. Encourage children to express their own feelings (at the present time) concerning this kind of work expectation.

. . . *identify a classroom situation in which one might improve perception skills.* PPO

Discuss possible improvement in noticing and remembering by making more effort in concentration. Collect the pupils' papers for later reference.

Tell children, now, to choose one object on the front wall and write a description of it in as much detail as possible. (E.G., its location, its size, its color, its texture, its shape.)

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Learning achievement depends upon effort and ability.

Educational Awareness

The decision-making process can be used to determine one's preferences between various job families at that point in time.

Decision Making

. . . *relate one's own learning achievements to a particular job requirement of a detective.* PPO

Have a few volunteers read their descriptions aloud, and take advantage of these examples to recall language work with modifiers. On the chalkboard keep a tally of which objects were chosen and how often. In case of high frequency choices, discuss reasons why those objects might have been popular. Identify objects not chosen by anyone at all--why not?

Before the following day, change the position of an object on the front wall. Then ask if someone notices a change. Continue making one change (adding, moving, removing) each morning and afternoon for a day or two--asking each time for the acknowledgement. Complete the activity then by having children turn around and repeat the original assignment of listing and describing objects on the front wall.

. . . *tell the results of deliberate effort to improve one's own perception skills.* PPO

Here, of course, it is hoped that the lists will be longer or have more detailed descriptions. Let children check these new efforts with their original papers, and possibly volunteer comments about their before and after differences.

. . . *identify at least one occupation, other than the detective, which would require keen perceptive skills.* PPO

To wrap things up, discuss types of workers, other than detectives, who might benefit from skills of observation and description.

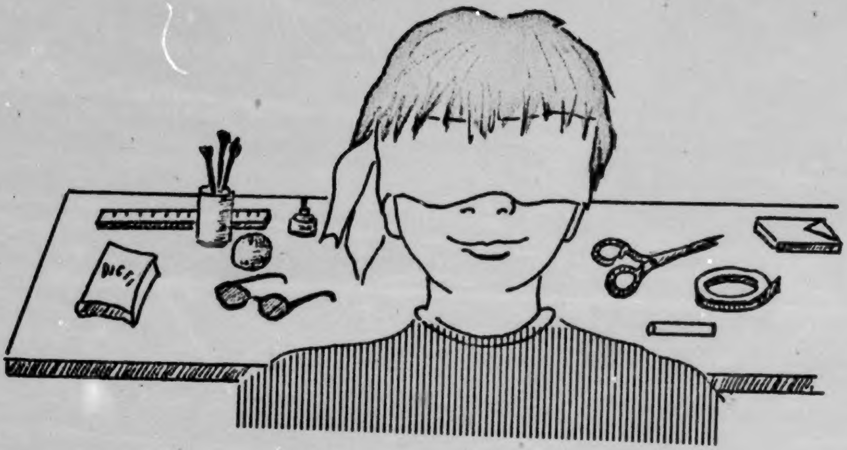
The REACT page which follows offers further practice in close observation. A variation on the same theme could be the classroom game in which one child hides his eyes while two children switch seats (or one leaves the room). The "it" person then must identify the change.

DM/Level 6/5

"Switch and Seek"

SWITCH AND SEEK

On a table arrange an assortment of between 10 and 15 different objects.



Allow a classmate to look at the assortment for 30 seconds, then turn his back to the table.

Quickly remove one of the objects from the table, and have your friend face the table and try to identify what was taken away.

Other ways of playing this game could be:

. . . add another object.

. . . change the position of an object.

. . . change the location of an object.

. . . replace an object with a new object.

. . . reverse the locations of two objects.

In addition, the length of time allowed for the first look may be increased or decreased.

INTERVIEW

Sixth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *discuss how one's own feelings about detective work might change within ten years.*

Attitudes and Appreciations Dimension

. . . *identify the detective's particular contributions to society.*

. . . *discuss the possibilities of girls as well as boys becoming detectives.*

Career Information Dimension

. . . *report on the detective's occupational likes and dislikes.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Interviewing
    - Discussion
    - Listening
    - Role playing with dialogue

Preplanning Suggestions

Plan an interview with a detective or police officer for a class activity.

Have "Lost and Found" columns from local newspapers.

INTERVIEW

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

The decision-making process can be used to determine one's preferences between various job families at that point in time.

Decision Making

A great many tasks can be performed by men or women.

Attitudes and Appreciations

Invite a local detective, or a police officer who can provide information about local investigative procedures, to visit with the class and discuss his work.

. . . *identify the detective's particular contributions to society.* PPO

Prepare carefully for this interview. Help children anticipate not only the questions they will want to ask, but also how they will contact the person, how they will record the interview, and how they will follow it up. An interview, individual or group, offers an opportunity to practice communication skills as well as to secure information. Be sure there is a substantial agenda with a definite beginning and ending.

. . . *report on the detective's occupational likes and dislikes.* PPO

Besides factual data about investigative work, seek out the interviewee's personal feelings and opinions about his job. Why did he choose this kind of work? What does he like most? Least? Some kind of written report might be assigned to summarize the content of the interview.

. . . *discuss how one's own feelings about detective work might change within ten years.* PPO

. . . *discuss the possibilities of girls as well as boys becoming detectives.* PPO

As a follow-up to the interview, encourage children to relate their own values, aptitudes, and preferences to the expectations of detective work. What changes might take place later that would affect their present feelings? In particular, how do the boys' feelings differ from the girls'?

The REACT page encourages further practice in seeking information. It would probably be helpful to study several examples of lost-and-found ads together before the REACT page is distributed.

DM/Level 6/6

"Just the Facts, Ma'am"

JUST THE FACTS, MA'AM

One of the detective's most important tasks is securing information from various citizens.

To give yourself some practice in gathering information to help solve a particular case, use one of these ads to prepare for a pretended interview.

Choose a classmate to help you.

Decide who will be the detective and who will be the person who lost the article in question.

Plan carefully the questions the detective must ask during the meeting. What kinds of things might the other person say that could be helpful, or possibly not helpful?

1. Lost & Found

LOST, a diamond ring on Ninth Street, between Grand Avenue and Main, on Sept. 4th. Reward. Mrs. Mary Jones, 1922 Maple St.

LOST, small black-and-white fox terrier near West Side Park on Sept. 1st. Reward. William Sumner, 902 First St.

LOST, a ____________________
between ____________________
and ____________________ on
Sept. 7th. Reward. Please call 246-7627.

After you have practiced your skit, and performed it for the class, perhaps you might want to choose a real ad from the lost-and-found column in the newspaper, and interview the person who placed the ad.

THE DETECTIVE STORY

Sixth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *compare one's own feelings about becoming a detective with those of a year ago.*

Career Information Dimension

. . . *define a specified number of terms associated with detective work.*

Educational Awareness Dimension

. . . *identify information about detective work that one has learned outside of school.*

Subject Matter Concepts

Language Arts
  Listening and Speaking
    Discussion
    Listening
  Writing Skills
    Descriptions

Preplanning Suggestions

Become knowledgeable about detective shows on television. (Use a Sunday newspaper or watch announcements.)
Prepare a library area for detective books and stories.

THE DETECTIVE STORY

Career-oriented learning may take place in school or out of school.

Educational Awareness

Occupations have their own vocabularies.

Career Information

The decision-making process can be used to determine one's preferences between various job families at that point in time.

Decision Making

Have volunteers give oral reports to the class about detective shows on television or books about detectives. Encourage identification of the activities which are tasks within his job. What skills (physical, intellectual, social) does he need? Where and when does he "work?" How is a private detective different from a police detective? What words seem to be a special part of a detective's world?

> . . . *identify information about detective work that one has learned outside of school.* PPO

> . . . *define a specified number of terms associated with detective work.* PPO

When dealing with materials from popular media, of course, some attention needs to be directed towards authenticity. Help children separate entertainment emphasis from factual information. (This could be a topic to ask about during an interview with a real detective.) Comparisons with information from reading, or other less glamorized sources may help this perspective.

> . . . *compare one's own feelings about becoming a detective with those of a year ago.* PPO

Pupils may be invited to express their personal feelings about becoming a detective. How, if at all, have these feelings changed since earlier years? Did anyone even give the idea a thought? If so, to what degree? If not, why not?

The "shadowing" REACT page may require teacher judgment, depending upon the temperament of the situation. Check for attitudes that suggest negative thoughts rather than gamelike fun. A possible substitute, or corollary, activity could be oral or written descriptions of classmates (or other mutually well-known persons) as "guess who?" clues.

DM/Level 6/7

"The Shadow"

THE SHADOW

Test your own powers of observation and staying power by "shadowing" one of your friends for a day.

Keep track of such things as:

. . . the time he spends in different places.

. . . whom he meets and talks with.

. . . what work he does.

. . . his playtime activities.

. . . what he is wearing.

. . . what he had for lunch.

Remember, this is for fun, so be careful not to say or do something that might be offensive.

One good test of your shadowing ability would be to share your observations with the "suspect" when you have finished, and see if he (or she) agrees with them.

Who knows? Maybe you are being shadowed, too!

TOOLS OF THE TRADE

Sixth Experience Level Activity

Performance Objectives

Decision Making Dimension

. . . *rank order a set of occupations according to one's preferences for the equipment normally used.*

Career Information Dimension

. . . *describe materials and equipment used by detectives.*

. . . *define a particular number of vocabulary terms concerned with detective work.*

Subject Matter Concepts

- Social Studies
  - Political Science
    - Rules for interaction
    - Constitutional basis for law
  - Sociology-Anthropology
    - Technology produces changes.
    - Individual characteristics
    - Variety of services

Preplanning Suggestions

Provide a bulletin board area for a display of equipment used by detectives.
Start a vocabulary list of materials and equipment used by detectives.
Have visuals and books about many occupations in which special tools and materials are used.

TOOLS OF THE TRADE

Occupations require the use of specific materials and equipment.

Career Information

Occupations have their own vocabularies.

Career Information

The decision-making process can be used to determine one's preferences between various job families at that point in time.

Decision Making

Use a bulletin board display to help touch off a discussion of materials and equipment that detectives are likely to use in their daily work. The vocabulary list can provide at least a beginning source for ideas.

. . . *describe materials and equipment used by detectives.* PPO

. . . *define a particular number of vocabulary terms concerned with detective work.* PPO

This activity can serve as a basis for individual or group research into one or more "tools of the trade." Help children think about the items in terms of their uses to a detective and their possible uses to workers in other occupations. In addition, help the pupils list equipment usually identified as essential to one or more specific occupations.

. . . *rank order a set of occupations according to one's preferences for the equipment normally used.* PPO

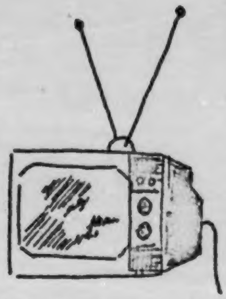
Help children to think about the relative utility of the items. Which ones are highly specialized for a single use? Which have more than one use? Which can be used in more than one occupation? Which ones could you operate right now? Which ones do you think you could operate if you had practice? Are there any that you think you could never use? This approach could be one way of allowing children to state their present inclinations toward particular occupations.

The REACT page for "tool watching" would benefit from real practice with a film or filmstrip in school. Choose one which shows a particular character using different types of equipment. Help pupils to identify the equipment, to describe the uses, and to consider the possibilities of their own competence in each case.

DM/Level 6/8

"Tool Watcher's Guide"

TOOL WATCHER'S GUIDE



Fingerprint
POWDER

While watching a detective show on television, use the form below to record the names of equipment, tools, or other materials that the detectives use in their work. Tell also how the object is used. Then check one of the three boxes to show whether you think you would be able to use the object properly right now, or after some instruction and practice, or probably never.

Name of Show ______________________________

EQUIPMENT	HOW IT IS USED	RIGHT NOW	AFTER PRACTICE	PROBABLY NEVER

On the other side of the paper, make the same observations for two different kinds of work as they appear on other shows.

TOOL WATCHER'S GUIDE

Name of Show ____________________

Kind of Worker ____________________

EQUIPMENT	HOW IT IS USED	RIGHT NOW	AFTER PRACTICE	PROBABLY NEVER

Name of Show ____________________

Kind of Worker ____________________

EQUIPMENT	HOW IT IS USED	RIGHT NOW	AFTER PRACTICE	PROBABLY NEVER

RELATED MATERIALS

Crime Scientists (Book) Mike McGrady. J. B. Lippincott Co., East Washington Square, Philadelphia, Pennsylvania 19105, 1961.

Foundations for Occupational Planning (Filmstrip) Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611.

Famous Detectives (Book) Eugene B. Block. Doubleday and Co., Inc., 501 Franklin Avenue, Garden City, New York 11530, 1967.

Great Detectives (Book) Robert Liston. Dell Publishing Company, 750 Third Avenue, New York, New York 10017, 1969.

I Can Do It (Worktexts and Activity Sheets) George A. Pflaum, 38 West Fifth Street, Dayton, Ohio 45402, 1971.

The People Around Us (Book) American Guidance Services, Inc., Publishers' Building, Circle Pines, Minnesota. 55014.

The Policeman (Film, Color or B/W, 16-min.) Encyclopaedia Britannica Educational Films, Inc., 425 North Michigan Avenue, Chicago, Illinois 60611, 1970.

Policeman Walt Learns His Job (Film, Color or B/W, 11-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1972.

The Rules We Follow (Filmstrip) Curtis A-V Materials, Division of Curtis Publishing company, Independence Square, Philadelphia, Pennsylvania 19105, 1966.

THE DETECTIVE

The detective is part of the law enforcement team. He works with the uniformed policeman, the chemist in the police laboratory, the ballistics expert, the records clerk, and the radio dispatcher. The detective's main contribution is gathering evidence to help solve a crime and to result in the arrest of a criminal.

Most detectives are employed by police departments in large cities, where shifting populations and well organized criminal activities require [illegible] and observation that cannot be very well handled by uniformed police. In larger cities, the detective is usually a specialist--working only on murder or manslaughter cases, or as a member of a squad dealing with narcotics, gambling, or vice. He may concentrate on investigating robberies of stores, warehouses, or goods in transit. As he works in one area, the detective becomes familiar with particular methods of investigation. He also gains sources of information inside and outside the criminal world, and goes wherever his investigations lead him.

Some detectives are employed by private agencies, department stores, hotels, or other business establishments which require some form of protection. Insurance companies may hire detectives to investigate suspicious claims. Lawyers may need detectives to trace missing persons or to collect evidence.

The detective often spends a great deal of time tracing leads or searching for clues. He may pose as a worker of some kind in order to gain access to information or to keep track of a suspect. There may be some risk of being exposed to physical violence or gunfire.

As a member of a municipal police force, a detective has usually served first as a member of the uniformed police. Generally, this requires sound physical condition, certain height and weight measurements, and age limits that are usually between 21 and 35. A detective usually works alone, and needs initiative, good judgment, and the ability to accept responsibility. He must also be able to work as part of a team when the situation requires it. In any case, to carry out his work, the detective needs a good memory, highly trained reasoning powers, patience, and perserverance. Knowledge of law and awareness of the ways that criminals operate are also important assets. He must be able to encounter a variety of situations, people, and problems and adjust quickly to whatever conditions may prevail.

Detectives must usually have at least a high school education, and pass a written examination given by the local civil service authorities. Sometimes these examinations may be competitive. English, civics, mathematics, and other college-preparatory courses are recommended as preparation, with journalism, public speaking, and typing as also helpful. Some technical institutes, colleges, and universities offer courses in police science and administration, and investigative work.

A candidate begins with a period of from six weeks to three months as a probationary policeman. In-service training programs by some local police departments provide work for experienced personnel as well as beginning trainees. All police and detective trainees are given a program of rigorous exercise to develop physical stamina. Unless he has had previous experience on a police force, the private detective usually learns through on-the-job observation of experienced men. He often attends a technical school or college to add to his knowledge and skill.

A police officer usually must be on the force for some time before he becomes eligible for promotion to detective. The promotion may be based upon examination or assignment by the head of the department. In seeking a job as a private detective, the applicant contacts agencies, stores, hotels, or other organizations directly.

In public service, detective work offers regular employment, good salaries, and a secure future. The work also offers a great variety of interesting situations. However, there are strenuous physical requirements and irregular hours. Physical dangers and constant contact with criminal elements of society may be considered possible disadvantages. Long hours of tracking down unproductive leads can be discouraging.

Employment opportunities will probably continue to grow, especially as urban areas enlarge. In addition, replacements will be needed as detectives leave their jobs for retirement or other reasons. The increase in self-service stores has added opportunities for store detectives, and more security personnel are likely to be needed by other businesses and organizations.

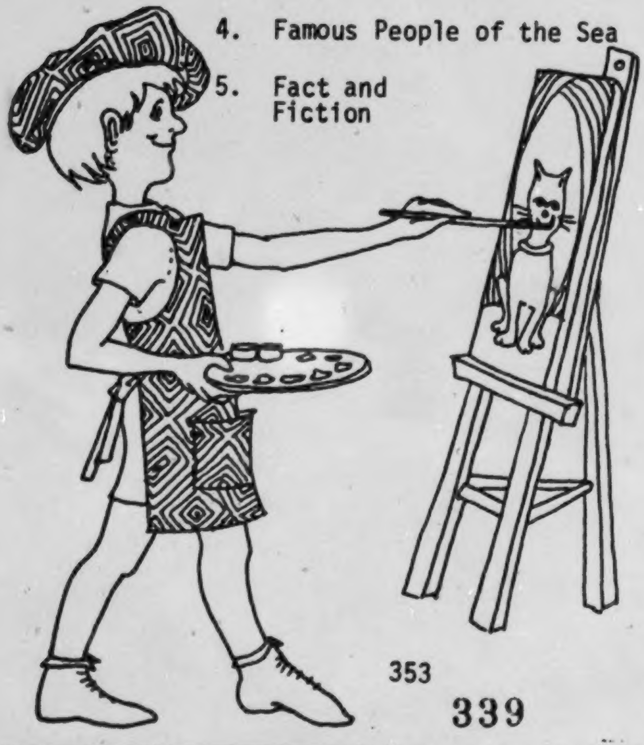
LEISURE AND LABOR AT SEA

SIXTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS:	Leisure-time activities and interests may lead to a career, and one's career may, in turn, affect the amount and use of leisure time.
OCCUPATIONAL FOCUS:	Oceanographer

ACTIVITIES
IN THIS INFUSION STRATEGY

1. Underwater Observations
2. Marine Life
3. The Ocean's Water
4. Famous People of the Sea
5. Fact and Fiction



Teacher Goals

Teacher goals of this strategy combine a Lifestyle Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Oceanographer. In this perspective the teacher's goals are to:

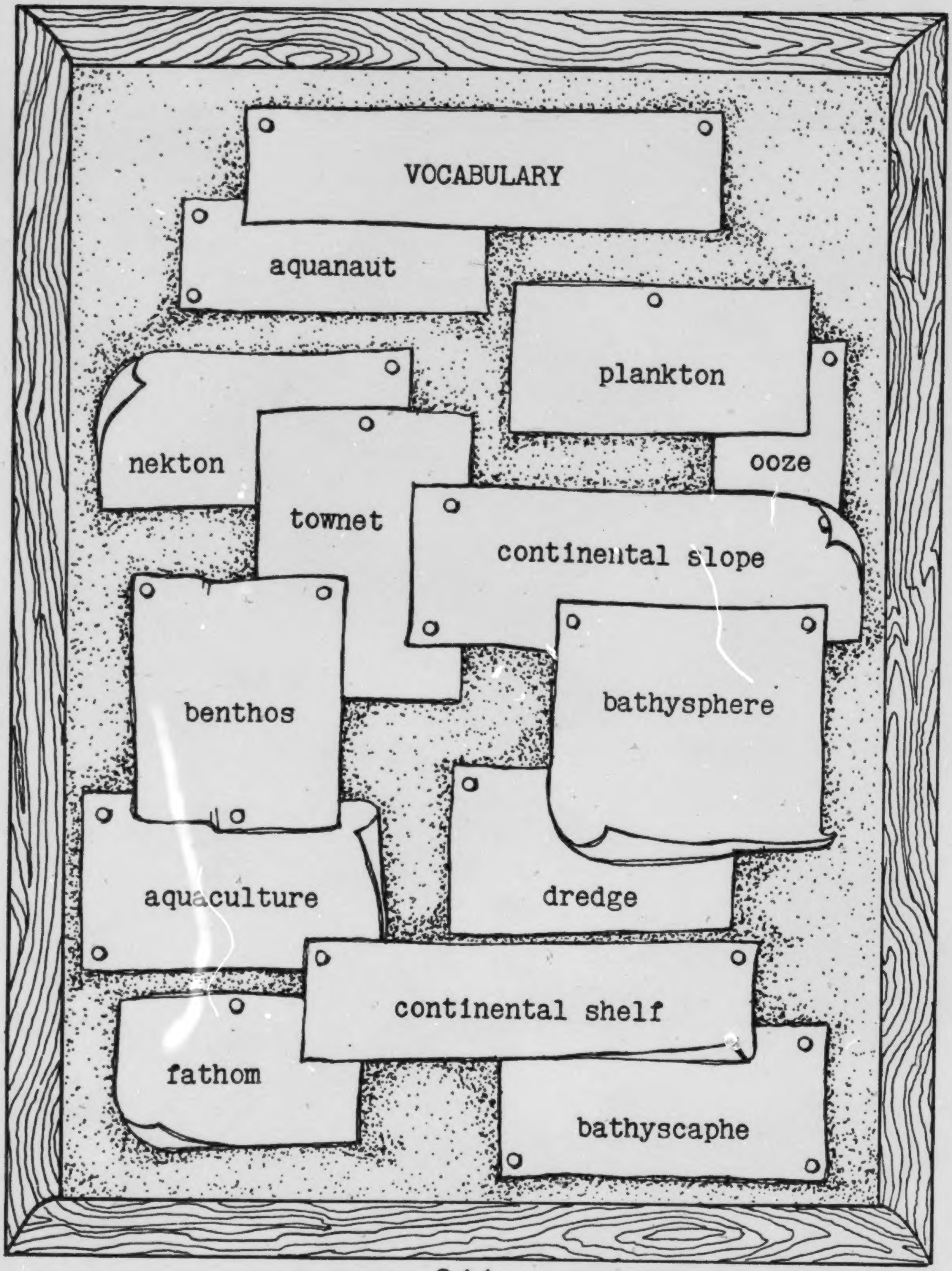
Encourage pupils to examine their own and other peoples' leisure-time activities.

Help children to relate their own knowledge and interests to oceanography topics.

Provide opportunities for understanding working conditions in various phases of oceanography.

Relate academic skills to job expectations of oceanographers.

Stimulate appreciation of the role of the ocean in history and fantasy.


VOCABULARY
aquanaut
plankton
nekton
ooze
townet
continental slope
benthos
bathysphere
aquaculture
dredge
continental shelf
fathom
bathyscaphe

UNDERWATER OBSERVATIONS

Sixth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *identify a particular leisure-time activity relating to oceanography.*

Attitudes and Appreciations Dimension

. . . *describe the responsibilities of maintaining an aquarium.*

Career Information Dimension

. . . *identify at least one work setting for an oceanographer.*

. . . *distinguish the likes and dislikes of students with regard to tending for underwater life.*

. . . *describe how interests in aquatic life may be helpful to an oceanographer.*

Subject Matter Concepts

- Science
  - Biology
    - Animals and plants range from one-celled to complex.
    - Living things adapt to their environment.
    - Man can control the environment of living things.
    - Animals differ in size and structure.
  - Scientific Method
    - Use of senses to gather data
    - Categorizations

Preplanning Suggestions

Have several clear plastic boxes with lids to use as aquariums.
Library books, movies, encyclopedia for researching how to establish an aquarium
Plants for an aquarium
Fish, snails, turtles, and other animals for the aquarium
Lake or pond water, if available
Visuals about oceanographers
Chart materials to record information about changes in the aquariums.

UNDERWATER OBSERVATIONS

Secure several clear plastic utility or shoe boxes with covers. These should be at least three inches high and be able to hold water. Assign one box to each two or three children for use as an aquarium.

Work involves the acceptance of responsibility for a task.

Attitudes and Appreciations

. . . *describe the responsibilities of maintaining an aquarium.* PPO

Encyclopedia articles, inexpensive aquarium handbooks, or some elementary science texts can offer basic directions for setting up a simple aquarium. The main issues are "ripe" water (which has set for a day or two), reasonably constant temperature, and a not excessive amount of animal life. Simple floating plants (hornwort, anacharis, cabomba) can suffice, and a "bare bottom" can make the observation of droppings and other sediment easier.

Discuss the basic needs of all animal life and relate these ideas specifically to aquatic forms. Encourage suggestions and questions about the kinds of plants and animals that would be appropriate for these small containers. Likely candidates could include guppies, small goldfish, or snails. Larger containers might have room for a baby water turtle or a salamander as well. In any case, samples of pond or lake water (if available) may provide some more unusual creepy-crawly critters.

Occupations have their own work settings.

Career Information

. . . *identify at least one work setting for an oceanographer.* PPO

Leisure-time activities and interests may lead to a career, and one's career may, in turn, affect the amount and use of leisure time.

Lifestyle

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

Occupations require special personal characteristics.

Career Information

. . . *identify a particular leisure-time activity relating to oceanography.* PPO

Help children realize that their very small aquarium may be considered a suggestion of an oceanographer's world of work. This could be a good time to distinguish among the various specialities of oceanographers--using visual aids or printed materials for illustration and anticipating other activities in this infusion strategy. Encourage descriptions of visits to public and private aquariums and personal experiences with lakes, rivers, or oceans. Relate early interest in underwater life to the possibility of choosing marine biology as a career.

Instruct children in a simple method of recording their observations from day to day. Has anything new appeared? Has anything disappeared? Has the condition of the water changed? Does the aquarium reach a point when it ought to be cleaned? Why?

. . . *distinguish the likes and dislikes of students with regard to tending for underwater life.* PPO

. . . *describe how interests in aquatic life may be helpful to an oceanographer.* PPO

Encourage expressions of opinions about the pros and cons of maintaining the classroom aquariums. What are the reasons for liking or disliking the activity? Discuss further the probable need for an oceanographer to have some real interest in the undersea world. As the activity is ended, reports from observations, related study, or discussions may be in order.

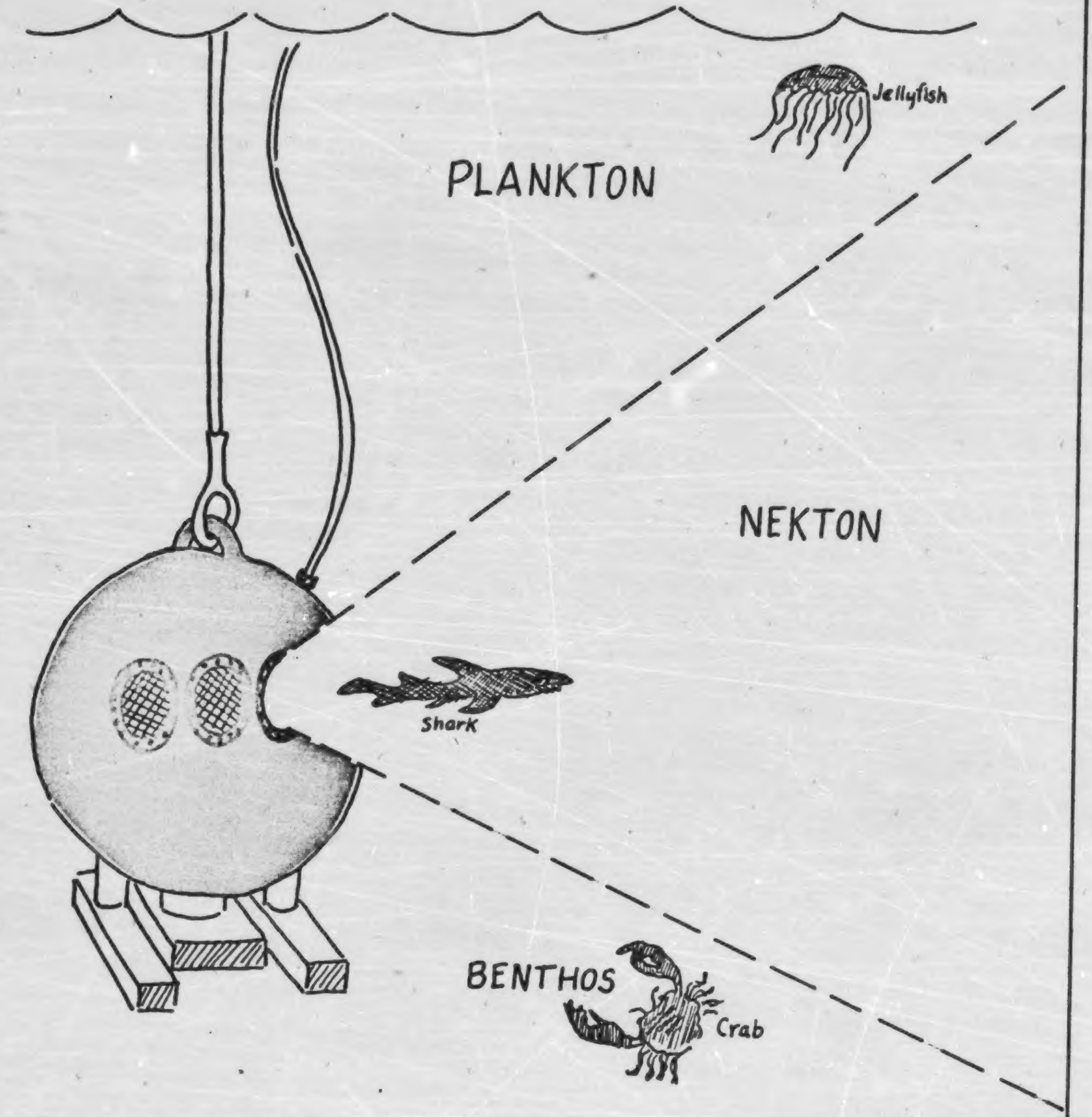
The REACT page is an exercise in classifying animal forms. The "Oceanography" article of an encyclopedia should supply a reasonably detailed explanation of the plankton, nekton, benthos categories. Plankton are the least likely to be identifiable in many types, but the other two offer many varieties. Pupils may use words or pictures or both to fill in the sheet. This small sheet idea might be expanded into a bulletin board project.

LS/Level 6/1

"Animals of the Ocean"

ANIMALS OF THE OCEAN

Animal life in the ocean is divided into three large groups: PLANKTON, NEKTON, and BENTHOS. The plankton are mostly tiny creatures that float near the surface, the nekton are free swimmers, and the benthos are bottom dwellers. Look these words up and then fill in names or drawings of several creatures in each group. See how many unusual ocean dwellers you can find.


Jellyfish
PLANKTON
NEKTON
Shark
BENTHOS
Crab

MARINE LIFE

Sixth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *describe how the study of an ocean animal affected one's interest in the ocean.*

Educational Awareness Dimension

. . . *identify specific knowledge about ocean life that one has learned in school.*

Subject Matter Concepts

- Science
  - Biology
    - Animals differ in size, structure, movement.
    - Living things grow.
    - Living things adapt to their environment.
    - Living things need food, air, waste disposal, reproduction.
  - Scientific Method
    - Describe similarities and differences.

- Language Arts
  - Writing Skills
    - Characterization and plot

Preplanning Suggestions

Books and audio-visuals about animals of the ocean
Materials for making simple booklet covers (REACT page)

Career-oriented learning may take place in school or out of school.

Educational Awareness

Leisure-time activities and interests may lead to a career, and one's career may, in turn, affect the amount and use of leisure time.

Lifestyle

For a research activity, invite pupils to choose a particular example of animal life from the ocean environment. This could involve anything from sea gulls or whales to coral or sea cucumbers.

> . . . *identify specific knowledge about ocean life that one has learned in school.* PPO

Instruct children to compare their ocean animal with a more familiar land animal. Thus, if a child has chosen to study the swordfish, he can compare its adaptive characteristics to those of the squirrel (or the cat, etc.) in terms of such items as:

securing food
oxygen supply
temperature requirements
protection from enemies
reproduction
life span
locomotion
body covering

> . . . *describe how the study of an ocean animal affected one's interest in the ocean.* PPO

As the study progresses, seek opportunities for discussion or other indications of changes (or lack of changes) in pupil interest in the general topic of oceanography.

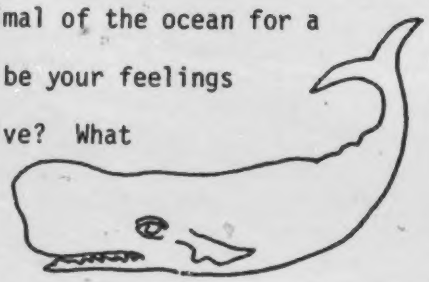
The REACT page for this activity offers an open-ended invitation to creative writing by having the child identify with an ocean creature he has studied. Be sure that children know what an autobiography is.

LS/Level 6/2

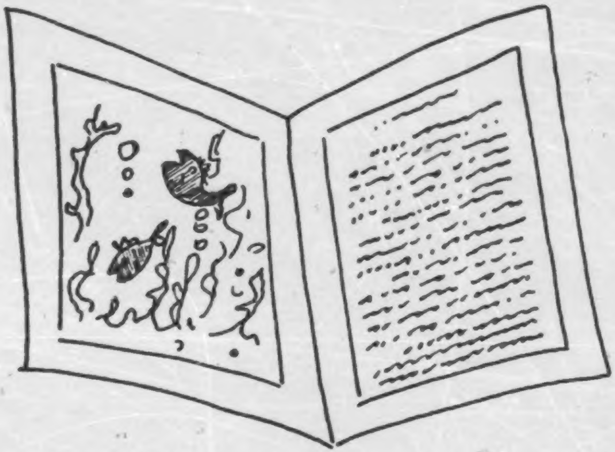
"Autobiography of a Critter"

AUTOBIOGRAPHY OF A CRITTER

Suppose you changed places with an animal of the ocean for a day, or a week, or a lifetime. What would be your feelings and ideas about what you are and how you live? What kinds of things would you see and hear? What would you like to do? What would you be afraid of? What other creatures would be your neighbors?



Make up a story about your adventures as an oceanic creature. You may want to illustrate your story with a drawing. Fold a piece of construction paper to make a cover.



On the other side of this paper are some suggestions for ideas for your story.

If you were a creature of the sea, you could tell about:

- your childhood
- your friends
- your enemies
- your favorite foods
- an exciting adventure you had
- pollution problems
- places you have visited
- your home territory
- your ways of moving from one place to another
- how you breathe
- what happens when a boat comes near

You might think about things like:

- What might a swordfish think when it sees a sailboat?
- How would an octopus feel and behave when it is frightened?
- How might a moray eel feel when it slithers around a coral reef?
- How would a scuba diver appear to a sea anemone?
- What other animals might an ichthyosaurus have met?
- What might a seahorse and an oyster talk about?

THE OCEAN'S WATER

Sixth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *explain how interest in chemistry or aptitude for mathematics might relate to a career in oceanography.*

Educational Awareness Dimension

. . . *relate one's mathematical understanding to oceanographic data.*

Subject Matter Concepts

- Science
  - Chemistry
    - Material things are gas, liquid, or solid.
    - Matter is composed of atoms and molecules.
    - Elements have one type of atom in a molecule.

- Mathematics
  - Facts and Operations
    - Decimal fractions
    - Percents
  - Problem Solving
    - Comparisons
    - Multiple-step problems

Preplanning Suggestions

Poster or overhead transparency of "Some Elements in Ocean Water" from the activity information
Science and library books, movies about the elements of water

On a large poster, an overhead transparency, or a ditto machine, make a copy of the following partial table of chemical elements in ocean water:

Some Elements in Ocean Water

(Measured in grams per metric ton, or parts per million.)

Oxygen	857,000.
Hydrogen	108,000.
Chlorine	18,980.
Sodium	10,561.
Magnesium	1,272.
Sulfur	884.
Calcium	400.
Bromine	65.
Rubidium	0.12
Zinc	0.01
Copper	0.003
Arsenic	0.003
Xenon	0.0001
Krypton	0.0003
Mercury	0.00003
Gold	0.00005

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

. . . *relate one's mathematical understanding to oceanographic data.* PPO

. . . *explain how interest in chemistry or aptitude for mathematics might relate to a career in oceanography.* PPO

Leisure-time activities and interests may lead to a career, and one's career may, in turn, affect the amount and use of leisure time.

Lifestyle

Use this table to encourage active involvement in identification of chemical elements and practice with decimal numbers. (A more complete chart may be found in an "Oceanography" article in an encyclopedia or an advanced science text.)

Clarify the metric units of weight, then direct questions toward combinations or comparisons, such as:

In a metric ton of ocean water, how many more grams of chlorine are there than sulfur?

In three metric tons, how many fewer grams of zinc are there than rubidium?

How many grams of krypton are there in 27 metric tons?

How many grams of calcium are there in a kilogram of ocean water?

How many grams of arsenic and bromine are there in 14 metric tons of seawater?

(Etc.)

The names of the elements may be used to induce interest in atomic weights or the periodic table of elements. Consideration of erosion through geologic time and how it affects the content of seawater may also be a corollary topic.

The REACT page contains a table comparing solids in river and ocean waters. Call attention to these figures as percentages rather than particular weights.

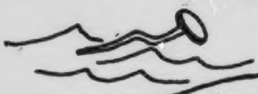
LS/Level 6/3

"Oceans and Rivers"

OCEANS AND RIVERS

Look at the chart below and compare the differing amounts of solid materials in ocean water and in river water.

Solid Materials	Percentage of All Solids in Ocean Water	 River Water
Chloride	55.0	5.7
Sodium	30.6	5.8
Sulfate	7.7	12.1
Magnesium	3.7	3.4
Calcium	1.2	20.4
Potassium	1.1	2.1
Bicarbonate	0.4	35.1
Silica	small	11.7
Iron-aluminum oxides	small	2.8
Nitrate	small	0.9
Others	0.3	small



__________________ Which solid is most abundant in ocean water?

__________________ Which solid is most abundant in river water?

__________________ In both ocean and river water, which solid is most nearly equal?

__________________ How much greater is the percentage of calcium in river water than in ocean water?

__________________ How much less is the percentage of magnesium than sodium?

__________________ In river water, how much greater is the percentage of sodium than nitrate?

You can probably make up many other similar questions for your friends to figure out. Try it!

FAMOUS PEOPLE OF THE SEA

Sixth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *describe particular skills in oceanography as they relate to leisure-time activities.*

Attitudes and Appreciations Dimension

. . . *discuss the employment possibilities of women and men as oceanographers.*

Educational Awareness Dimension

. . . *cite the work experience of a famous ocean scientist as an example of continuing learning.*

Subject Matter Concepts

- Science
  - Scientific Method
    - Investigative and evaluative techniques vary.
    - Specialized instruments help observations.
    - Famous scientists have made discoveries.
    - New fields of investigation

- Social Studies
  - Geography
    - Man-made environmental changes
  - History
    - Human experience is continuous and interrelated.
  - Economics
    - Using natural resources

Preplanning Suggestions

Locate information about individuals who work in the ocean environment--Cousteau, Beebe, etc.
Watch for television programs about oceanography and oceanographers.
Have books and encyclopedias about oceanography.

FAMOUS PEOPLE OF THE SEA

Learning is a lifelong process.

Educational Awareness

Leisure-time activities and interests may lead to a career, and one's career may, in turn, affect the amount and use of leisure time.

Lifestyle

A great many tasks can be performed by men or women.

Attitudes and Appreciations

Use films, filmstrips, or printed materials to provide information about one or more well-known individuals whose work has involved some aspect of the oceanic environment. Possible choices might be:

Jacques Cousteau
Peter Freuchen
William Beebe
Thor Heyerdahl
August and Jacques Piccard
Fridtjof Nansen

Reference might also be made to current television specials.

. . . *cite the work experience of a famous ocean scientist as an example of continuing learning.* PPO

. . . *describe particular skills in oceanography as they relate to leisure-time activities.* PPO

. . . *discuss the employment possibilities for women and men as oceanographers.* PPO

Have pupils choose a person as the subject of a report--oral or written. Encourage them to consider the lifestyle of individuals involved in work pertaining to the ocean. What interests and skills did the person develop which helped with career tasks? How were skills and facts gained or improved during leisure time? Are these expectations equally reasonable for men and women?

The REACT page for this activity directs the pupil to relate his present view of himself to job expectations in oceanography. Preface this assignment with clarifications of the broad areas to be considered:

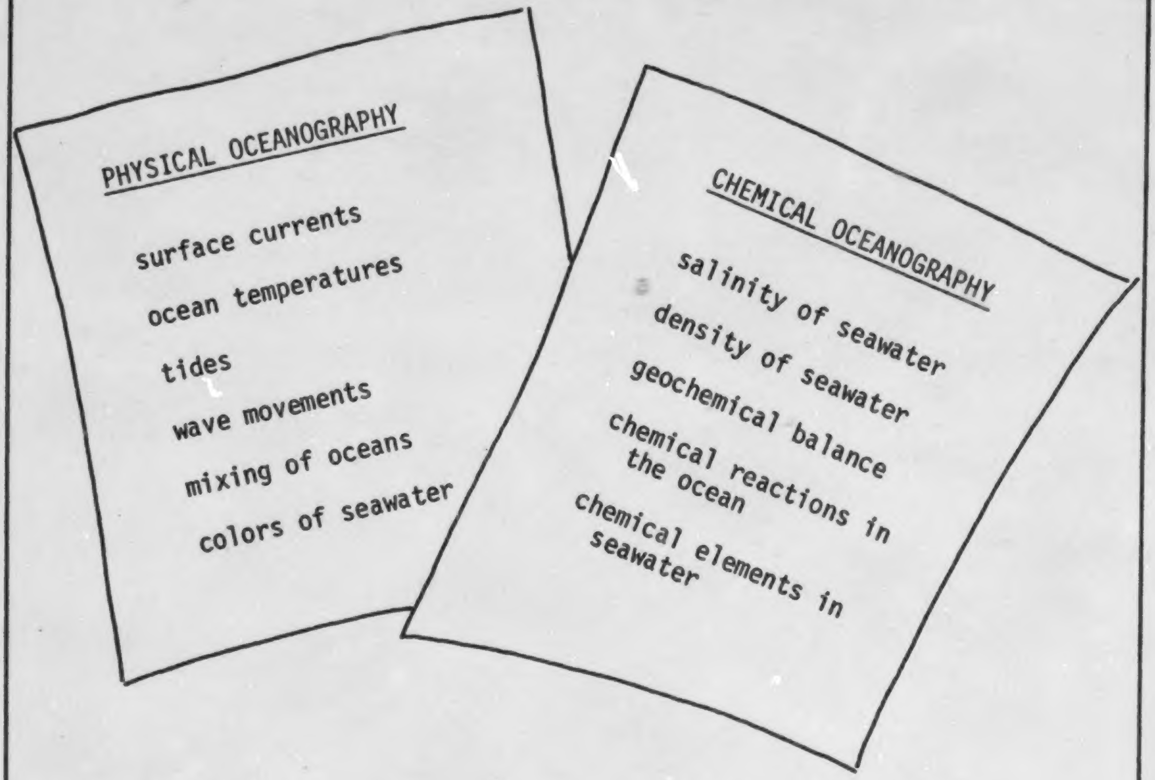
Chemical Oceanography
Physical Oceanography
Biological Oceanography
Geological Oceanography

The "Oceanography" article in a good encyclopedia can provide further information along these lines. Direct pupil thinking toward requirements in terms of physical condition, academic preparation, personal interests and values, tools and equipment, and working environments. Negative attitudes may be adjusted by choosing either the field most unsuitable or the field least unsuitable. Stress the identification of reasons for opinions and try to relate ideas to present leisure-time activities.

LS/Level 6/4

"Fields of Oceanography"

FIELDS IN OCEANOGRAPHY



PHYSICAL OCEANOGRAPHY

- surface currents
- ocean temperatures
- tides
- wave movements
- mixing of oceans
- colors of seawater

CHEMICAL OCEANOGRAPHY

- salinity of seawater
- density of seawater
- geochemical balance
- chemical reactions in the ocean
- chemical elements in seawater

These lists represent ideas that you may encounter when learning about four of the large fields of oceanographic work.

Check the encyclopedia and other science books until you know enough about each field to choose the one for which you think you are presently most suited. Write a short description of how one of these fields fits your strengths and weaknesses, health, and interests, as well as your present knowledge. How do your hobbies or other activities fit in with thoughts about oceanography?

BIOLOGICAL OCEANOGRAPHY

- plankton
- nekton
- benthos
- marine mammals
- reptiles
- birds
- algae
- kelp

GEOLOGICAL OCEANOGRAPHY

- ocean floor
- ooze
- continental shelf
- continental slope
- seamounts
- trenches
- sounding devices

FACT AND FICTION

Sixth Experience Level Activity

Performance Objectives

Lifestyle Dimension

. . . *relate outside reading or other learning to school work.*

Career Information Dimension

. . . *describe a tool or machine devised for a special oceanographic task.*

Educational Awareness Dimension

. . . *identify at least one fact about the ocean's reputation that one has learned outside of school.*

Subject Matter Concepts

- Science
  - Scientific Method
    - Scientific knowledge accumulates.
    - Famous scientists have made discoveries.
    - New fields of investigation
- Social Studies
  - History
    - Exploration
    - Human experience is continuous and interrelated.
    - Relation of geography and history
- Language Arts
  - Reading
    - Judgments of stories, characters
    - Visual imagination
    - For information
    - Noting tone and mood
  - Writing Skills
    - Vocabulary building

Preplanning Suggestions

Audio-visuals about the lore of the ocean. A list of books appears on the first page of the activity.

Graph paper

FACT AND FICTION

Career-oriented learning may take place in school or out of school.

Educational Awareness

Leisure-time activities and interests may lead to a career, and one's career may, in turn, affect the amount and use of leisure time.

Lifestyle

Occupations require the use of specific materials and equipment.

Career Information

Use films, filmstrips, printed materials, or brainstorming with pupils to supply information about true and fanciful lore of the ocean. For example:

Poseidon (Neptune)
Oceanids, Nereids, and Naiads
Moby Dick
Captain Stormalong
Twenty Thousand Leagues Under the Sea
Explorers of historical note
The Voyage of the Beagle (Darwin)
Polar expeditions
Pirates and privateers
Naval history
Aquaculture

. . . *identify at least one fact about the ocean's reputation that one has learned outside of school.* PPO

. . . *relate outside reading or other learning to school work.* PPO

. . . *describe a tool or machine devised for a special oceanographic task.* PPO

This extremely broad range of possible subjects related to the ocean (past, present, and future) can offer motivation and sources for individual or group study, reports, skits, or creative writing. While accumulating information, direct pupils to look especially for the kinds of equipment used by the characters they are studying. Encourage use of outside resources.

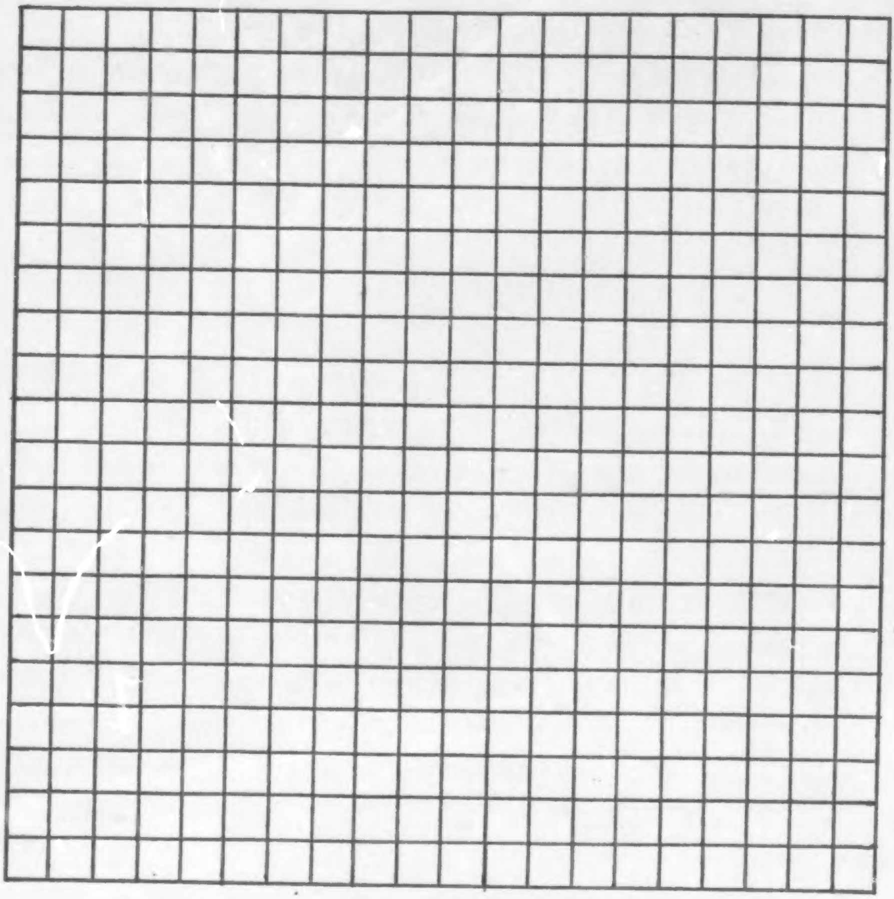
The REACT page is a fun-type vocabulary experience. Some practice with crisscrossing and scoring on the chalkboard or graph paper could help pupils to prepare for work on their own.

LS/Level 6/5

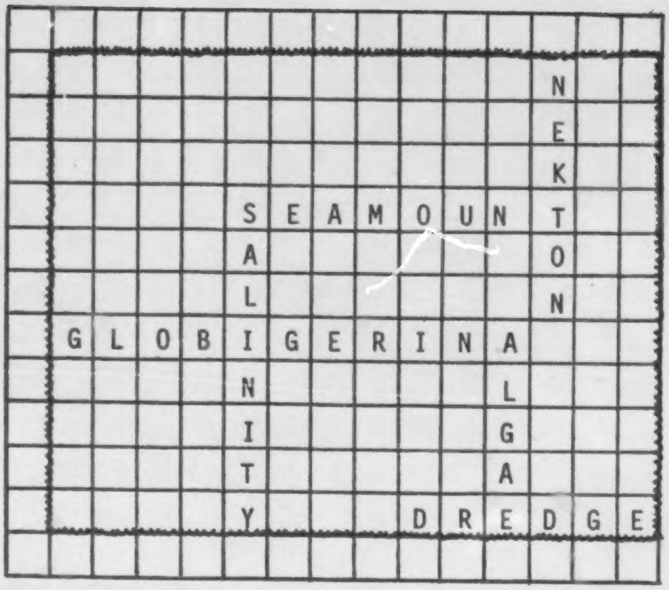
"Crisscross"

CRISSCROSS

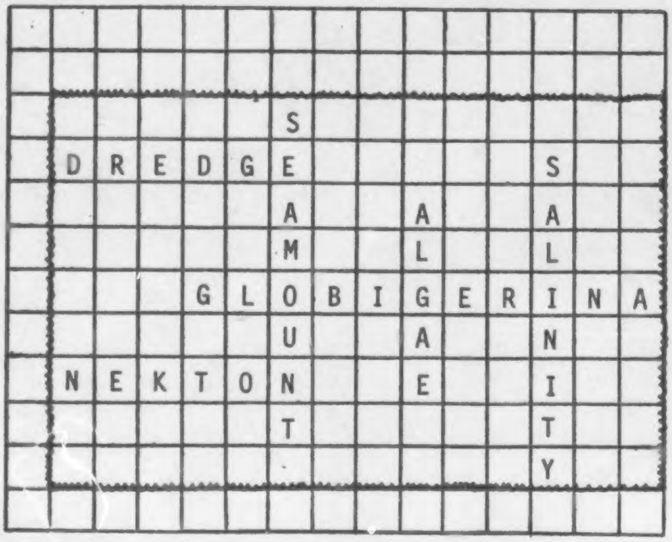
Use the list of oceanography words below to form a crisscross pattern on the grid. Use all the words with as many crossings as possible. You could score yourself by figuring the rectangular area of the grid that you used--considering the smaller the area, the better the score. Examples of crisscrossing and scoring are on the other side of the page.



PLANKTON
NEKTON
BENTHOS
ABYSS
GLOBIGERINA
DIATOM
ALGAE
FATHOM
WAVE
SALINITY
BATHYSCAPHE
DREDGE
AQUANAUT
TRENCH
CURRENT
SEAMOUNT


NEKTON
SEAMOUN
SALINITY
GLOBIGERINA
ALGA
DREDGE

A rectangle of 154 square units is needed to enclose this pattern. (11 x 14)


SEAMOUNT
DREDGE
SALINITY
ALGAE
GLOBIGERINA
NEKTON

A rectangle of 126 square units is needed to enclose this pattern. (9 x 14)

RELATED MATERIALS

Exploring the World of Oceanography (Book) D. Telfer, Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607.

Food From the Sea (Film, Color, 11-min.) Bailey Film Associates, 2211 Michigan Avenue, Santa Monica, California 90404, 1972.

Ocean Products of Japan (Film Loop) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1972.

Oceanography: Science of the Sea (Film, Color, 11-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

Our Working World (Multi-Media Kit) Lawrence Senesh. Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611.

Problems and Attitudes in School (Film, Color, 9-min.) Henk Newenhouse, 1825 Willow Road, Northfield, Illinois 60093, 1970.

Saturday's Child (Book) Suzanne Seed. J. Philip O'Hara, Inc., 20 East Huron Street, Chicago, Illinois 60611, 1973.

The Waters Around Us (Sound Filmstrip) Eye Gate House, Inc., 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

You and the Oceans (Book) D. Sherman. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1965.

Your Career in Oceanography (Book) Waldo T. Boyd. Julian Nessner, 1 West 39th Street, New York, New York 10018, 1968.

OCEANOGRAPHER

An estimated 5,200 oceanographers and closely related technical personnel were employed in the United States in 1968. About four-fifths were employed by the Federal Government and colleges and universities. Those Federal agencies employing substantial numbers of oceanographers were the Naval Oceanographic Office, the Bureau of Commercial Fisheries, and the Environmental Science Services Administration.

A growing number of oceanographers worked in private industry for firms that design and develop instruments and vehicles for oceanographic research. A few worked for fishery laboratories of state and local governments.

The minimum educational requirement for beginning professional positions in oceanography is the bachelor's degree with a major in oceanography, biology, a geo-science, one of the other basic sciences, mathematics, or engineering. For professional positions in research and teaching and for advancement to high-level positions in most types of work, graduate training in oceanography or one of the basic sciences usually is required.

Undergraduate training in oceanography, marine science, ocean engineering, or fisheries was offered by only about fifteen colleges and universities in 1968; and only seven institutions offered the bachelor's degree with a major in oceanography. However, since oceanography is an interdisciplinary field, training in the related basic sciences, when coupled with a strong interest in oceanography, is adequate preparation for most beginning positions in the field or for entry into graduate school.

Important undergraduate courses for the prospective oceanographer are in the fields of mathematics, physics, chemistry, geophysics, geology, meteorology, and biology. In general, the student should specialize in the particular science field which is closest to his area of interest in oceanography. For example, students interested in chemical oceanography should obtain a degree in chemistry.

In 1968, about thirty-five colleges and universities offered advanced degrees in oceanography and about thirty other institutions offered advanced courses in fisheries, marine science, or oceanographic engineering. The academic work of the graduate student in oceanography consists primarily of extensive training in a basic science combined with further training in oceanography. The graduate student usually works part of the time aboard ship--doing oceanographic research for his dissertation and at the same time acquiring familiarity with the sea and the techniques used to obtain oceanographic information. A variety of summer courses is offered by universities at the various marine stations along our coasts. These are for both undergraduate and graduate students and are recommended particularly for students from inland universities.

The beginning oceanographer with the bachelor's degree usually starts as a research or laboratory assistant or in a position involving routine data collection, analysis, or computation. Most new oceanographers receive on-the-job training related to the specific work at hand. The nature and extent of the training vary with the background and needs of the individual. Thus, the new graduate who has a degree in a basic science rather than in oceanography usually can be provided enough understanding of oceanographic principles to enable him to perform adequately in this field.

Beginning oceanographers having advanced degrees usually can qualify for research and teaching positions. Experienced oceanographers may be selected for administrative positions, in which they may supervise a research laboratory or direct specific survey or research projects.

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D.C.
pp. 141-144.

KNOW THY CHICKENS

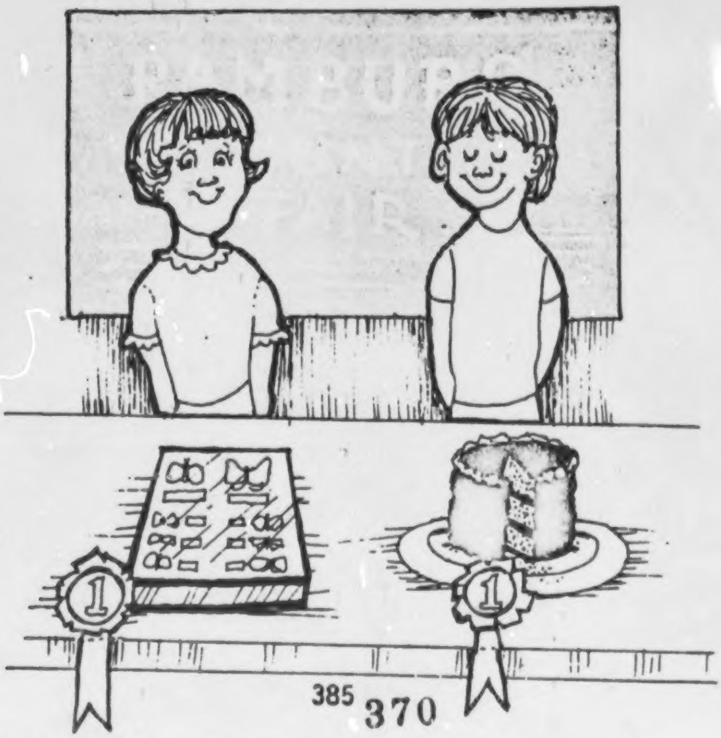
SIXTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS: There is a relationship between an individual's knowledge and acceptance of self and his career preference.

OCCUPATIONAL FOCUS: Poultry Farmer

ACTIVITIES
IN THIS INFUSION STRATEGY

1. The Chicken Game
2. Poultry Products
3. A Touch of Drama



Teacher Goals

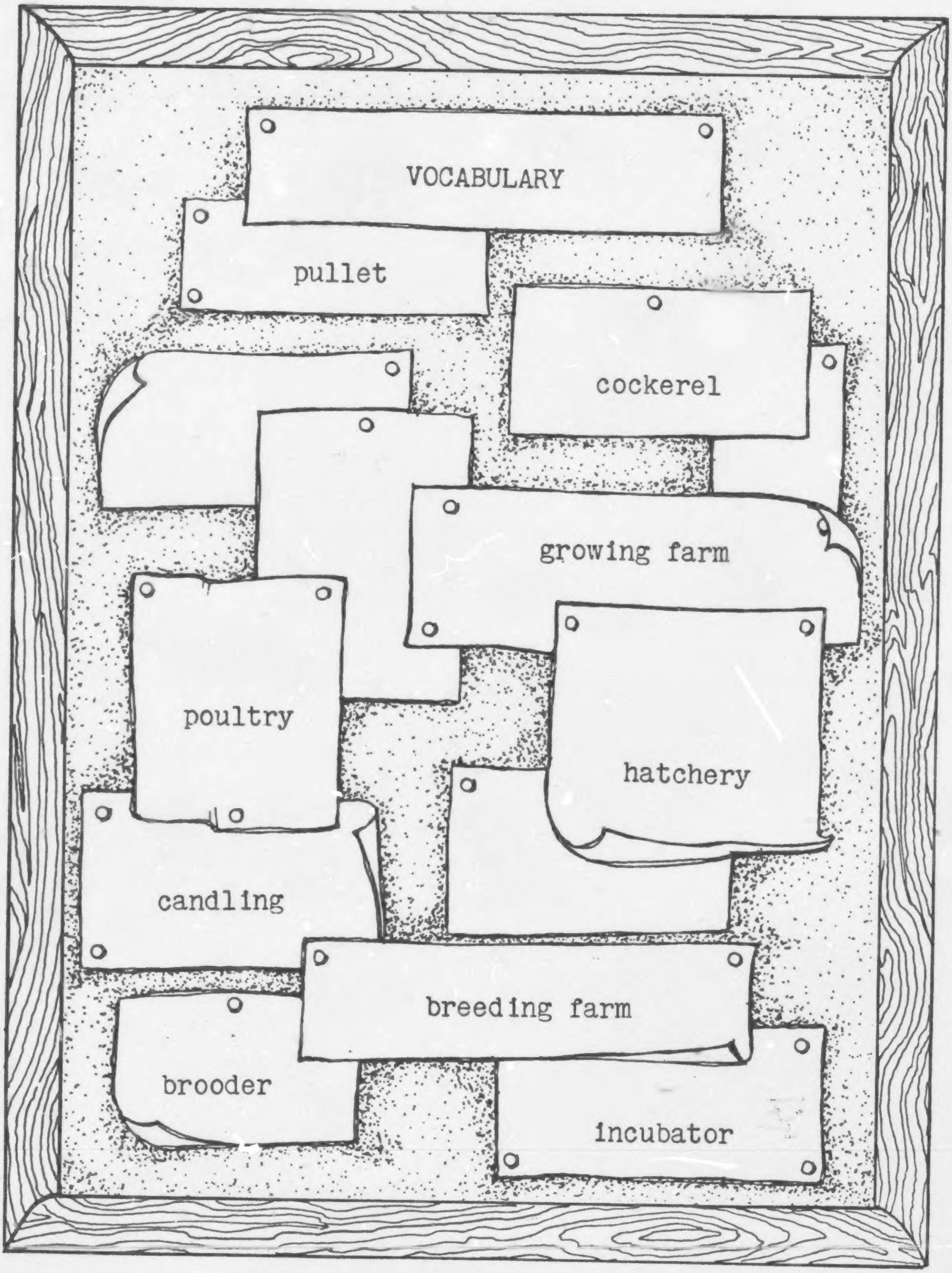
Teacher goals of this strategy combine a Self-Development Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Poultry Farmer. In this perspective the teacher's goals are to:

Enhance pupil appreciation of realistic knowledge about one's own aptitudes and interests.

Give pupils opportunities to match self-knowledge with present career preferences.

Provide informational activities regarding poultry farming and its requirements.

Relate poultry farming to other types of farming and other types of businesses.


VOCABULARY
pullet
cockerel
growing farm
poultry
hatchery
candling
breeding farm
brooder
incubator

THE CHICKEN GAME

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *explain how the work of a poultry farmer would, or would not, be suitable for oneself.*

Attitudes and Appreciations Dimension

. . . *identify the time scheduling required by the raising of poultry.*

. . . *describe the interdependence of the specialties within the poultry business.*

Career Information Dimension

. . . *list materials and equipment required by a poultry farmer.*

. . . *explain why a particular chicken hatchery is located where it is.*

Educational Awareness Dimension

. . . *relate one's own skills and knowledge to the poultry business.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Discussion skills
    - Noting and remembering details
  - Reading
    - For information
    - Library skills
    - Topics and subtopics
  - Grammar and Usage
    - Labeling and classifying
- Language Arts (Cont'd.)
  - Writing Skills
    - Writing a summary
    - Outlining
    - Paragraphing
    - Notettaking
- Social Studies
  - Economics
    - Division of labor
    - Production of goods and services
    - Interdependence of city and rural

Subject Matter Concepts (Cont'd.)

Science
  Biology
    Living things need food, air, waste disposal; reproduce
    Man can control environments of living things.

Preplanning Suggestions

Materials for keeping a record of brainstorming ideas
Materials for children to make notebooks--construction paper, etc.
Resource materials about poultry farming

THE CHICKEN GAME

More than 90% of poultry sold for meat are chickens. Most of these birds are raised in large commercial hatcheries. Others are a by-product of general farming. This activity seeks appreciation of the conditions of poultry production.

Brainstorm with the children using the term "poultry" as a starting point. Encourage expression of anything that may come to mind on the subject and write the children's contributions on the chalkboard. Have children jot down notes as they go along.

Occupations require the use of specific materials and equipment.

Career Information

. . . *list materials and equipment required by a poultry farmer.* PPO

Technological, economic, social, and political factors influence supply and demand of jobs.

Career Information

. . . *explain why a particular chicken hatchery is located where it is.* PPO

Most occupations include common expectations, such as punctuality, dependability, and avoidance of excessive absence.

Attitudes and Appreciations

. . . *identify the time scheduling required by the raising of poultry.* PPO

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

. . . *describe the interdependence of the specialities within the poultry business.* PPO

Discuss with children possible ways to organize the items they have suggested. For example, larger headings might include:

different kinds of chickens
different kinds of poultry
materials and equipment
personal characteristics of a poultry farmer
customers of a poultry farmer
businesses that supply the poultry farmer

Have pupils use their brainstorming notes to begin an individual notebook

There is a relationship between an individual's knowledge and acceptance of self and his career preference.

Self-Development

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

about the poultry business. Provide further information through selected audiovisual aids, encyclopedias, and other printed materials. Part of each child's notebook could be a concentration on one particular breed of chicken, including its historical development as a unique breed. For instance, the Rhode Island Red strain began in about 1850 when a sailing vessel brought a little red-feathered rooster to Compton, Rhode Island. It was allowed to run with some of the local hens and the natural results were later improved upon by a man named Isaac Wilbour.

In addition, the identities and functions of breeding farms, commercial hatcheries, and growing farms could be distinguished.

. . . explain how the work of a poultry farmer would, or would not, be suitable for oneself. PPO

. . . relate one's own skills and knowledge to the poultry business. PPO

As pupils become more aware of the work of the poultry farmer, encourage expressions of personal feelings about the various job expectations. Which things seem appealing? Which things might be unpleasant or otherwise disadvantageous? How would a person get started in the poultry business? What knowledge and skills are needed? Do I have, or could I acquire, any of these basic requirements? Would I want to? Why, or why not?

These ideas could be added to the notebook in a separate section. The pupil can tell whether or not the poultry business might be suitable for himself, together with reasons for the decision at this time.

The REACT page directs further study about kinds of poultry other than chickens. This can lend itself to individual work, an activity for small groups, or an activity for the whole class together.

SD/Level 6/1

"Let's Talk Turkey"

LET'S TALK TURKEY

And not only turkey, but let's also put in a word for the duck, the goose, the guinea fowl, the pheasant, and the pigeon.

All of these birds are raised for their meat or eggs.

Have you ever eaten turkey? Probably so, right? How about duck or any of the others?

Have you ever eaten any kind of eggs other than chicken eggs.

goose
PIGEON
DUCK
GUINEA FOWL
pheasant

Choose one or more of these kinds of poultry and find out as much as you can about its members. For example:

How are tame birds different from their wild relatives?

What are their breeding habits?

What different varieties have been developed?

Where are the largest hatcheries located?

How long does it take to raise the chickens to a size that can be marketed?

Meanwhile, look for pictures of any or all of these kinds of poultry. Perhaps some of your classmates would like to share a collection or trade pictures of different kinds of poultry.

POULTRY PRODUCTS

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *distinguish a rank order in one's tastes for poultry products.*

Attitudes and Appreciations Dimension

. . . *relate the products of the poultry business to the needs or expectations of at least two other parts of society.*

Educational Awareness Dimension

. . . *identify knowledge and skills used with respect to the marketing and distribution of poultry products.*

Subject Matter Concepts

- Language Arts
  - Grammar and Usage
    - Labeling and classifying
  - Listening and Speaking
    - Discussion skills

- Social Studies
  - Economics
    - Supply and demand
    - Transportation of goods
    - Interdependence of city and rural
    - Division of labor

Preplanning Suggestions

Bulletin board display of uses of poultry products
Magazines, catalogs, newspapers, etc. for bulletin board pictures
Resource materials for information about poultry products

POULTRY PRODUCTS

Specialized occupations result in an interdependent society.

Attitudes and Appreciations

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

This activity follows through on implications of the previous one. Once the poultry products are shipped from the hatchery or farm, what happens to them? Are the birds or eggs used for anything other than food?

. . . *relate the products of the poultry business to the needs or expectations of at least two other parts of society.* PPO

. . . *identify knowledge and skills used with respect to the marketing and distribution of poultry products.* PPO

The main thrust of this study is to gather and organize information about any and all kinds of products that can result from the poultry farmer's delivery of birds or eggs to the general market. To whom does a poultry farmer directly ship his products? What other middlemen are involved between the poultryman and the ultimate consumer? What means of packaging and preserving are used?

A combined bulletin board and table display may be used to focus on such items as:

(FOODS)
- TV dinners
- frozen meat pies
- canned soups
- prepared egg products
- various home-prepared forms of pet foods

(OTHER USES)
- feathers for decorations
- feathers for stuffings

There is a relationship between an individual's knowledge and acceptance of self and his career preference.

Self-Development

family pets
zoo exhibits
experimental animals

. . . distinguish a rank order in one's tastes for poultry products. PPO

Discuss pupils' own experiences with poultry as food sources or otherwise. Has anyone ever eaten a kind of bird other than chicken or turkey? What are the preferences of the class for the different ways chicken meat might be prepared? Has anyone had a fowl of some kind for a pet?

The REACT page applies the idea of personal tastes to eggs and other poultry foods. Pupils will probably need help defining some of the methods of preparation of eggs. A key concept for this consideration of poultry products is the interdependence of the consumer and the poultry farmer. Help pupils to appreciate that tastes and preferences in eating are essential factors in creating the market that the poultry farmer anticipates.

SD/Level 6/2

"What's Your Choice?"

WHAT'S YOUR CHOICE?

As you know, there are lots of ways to cook eggs.

Some people even eat them raw!

Here are some of the most common ways that eggs might be prepared:

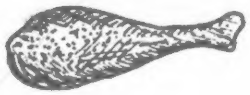
- ☐ Fried egg, sunny-side up
- ☐ Fried egg, over lightly
- ☐ Fried egg, over hard
- ☐ Scrambled egg
- ☐ Basted egg

- ☐ Poached egg
- ☐ Hard-boiled egg
- ☐ Soft-boiled egg
- ☐ Egg salad

Mark each box according to how you feel about that way of preparing eggs. Mark your very favorite way with an "A." Mark the one you like least with an "X." If there is one that you have never tasted, mark it with an "O." The ones that are left could be marked "L" for liking or "N" for not caring.

Do the same for these parts of a chicken:

- ☐ Drumstick
- ☐ Wing
- ☐ Thigh
- ☐ Breast
- ☐ Neck



- ☐ Back
- ☐ Gizzard
- ☐ Liver
- ☐ Heart

A TOUCH OF DRAMA

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *describe at least two personal characteristics required by farmers of any kind.*

. . . *identify one's own present level of academic skills development and locate areas in need of improvement.*

Attitudes and Appreciations Dimension

. . . *take part in a dramatization of a newly hired worker being oriented to duties in a commercial chicken hatchery.*

. . . *discuss the suitability of poultry farming for both men and women.*

Career Information Dimension

. . . *point out potentially pleasant or unpleasant features of poultry raising.*

Educational Awareness Dimension

. . . *identify the training or educational requirements for becoming a poultry farmer.*

Subject Matter Concepts

- Language Arts
  - Listening and Speaking
    - Playing roles with dialogue
    - Pantomine
    - Discussion skills
- Social Studies
  - Geography
    - Interaction between people and environments
    - Modification of environments
  - Economics
    - Division of labor
    - Goods and services
    - Interdependence of city and rural

Preplanning Suggestions

Resource materials--visuals, encyclopedias, books, movies about poultry raising and hatcheries
Large boxes, paints, etc. for backgrounds for skits

A TOUCH OF DRAMA

A given work setting requires certain policies and procedures.

Attitudes and Appreciations

The individual worker determines which aspects of an occupation may be pleasant or unpleasant.

Career Information

Career-oriented learning may take place in school or out of school.

Educational Awareness

This activity suggests using types of simple dramatizations to provide pupils with means and motivation for seeking further understanding about the people in the poultry business.

. . . *take part in a dramatization of a newly hired worker being oriented to duties in a commercial chicken hatchery.* PPO

. . . *point out potentially pleasant or unpleasant features of poultry raising.* PPO

. . . *identify the training or educational requirements for becoming a poultry farmer.* PPO

As knowledge about the poultry business accumulates, interest pupils in using their knowledge to develop simple forms of dramatization on various themes about the subject. Some may prefer a skit format, others a monologue or an interview approach. In any case, take full advantage of opportunities for making props and scenery and for creating sound effects. Possible topics for dramatization are:

The orientation of a new employee to his work in a commercial hatchery

The orientation of a new hen "employed" as an egg layer in a large commercial hatchery

A family on a smaller farm carrying out their chores, especially in caring for the poultry

A chicken-house viewpoint of a family on a smaller farm carrying out their chores

The adventures of an egg from nest to frying pan

A great many tasks can be performed by men or women.

Attitudes and Appreciations

There is a relationship between an individual's knowledge and acceptance of self and his career preference.

Self-Development

There is a relationship between an individual's knowledge and acceptance of self and his career preference.

Self-Development

. . . *discuss the suitability of poultry farming for both men and women.* PPO

. . . *describe at least two personal characteristics required by farmers of any kind.* PPO

Discuss the ideas embodied in the dramatizations with emphasis on the physical, social, and intellectual requirements for working in the poultry business. Relevant topics may be: understanding of the birds' needs for health and growth; ability to stay with an established routine; knowledge of marketing conditions; dependence upon weather; relationship to suppliers and customers; organizational and supervisory skills; and use of tools or machinery.

. . . *identify one's own present level of academic skills development and locate areas in need of improvement.* PPO

The REACT page zeroes in on the subconcept of self-knowledge. Some discussion about self-knowledge, especially the implications for acceptance, would be very helpful for most pupils. Encourage distinction between passive acceptance, which assumes no future change, and active acceptance, which uses present reality as a means for readapting and improving one's skills and attitudes as maturation and experience provide increasing perspective.

SD/Level 6/3

"How Am I Doing?"

HOW AM I DOING?

As you are getting close to entering junior high school, take a good look at how you are doing in your school work so far. Mark each of the skills listed below

with a "G"	if you feel your work is good and you really understand what you are doing;
with an "A"	if you feel your work is average, or so-so, and you can keep track of things most of the time;
with an "N"	if you feel you need to improve your skill or understanding.

READING

☐ I understand the reading lessons in school.

☐ I read by myself for fun.

☐ I read by myself to find things out.

WRITING

☐ Other people can read my writing.

☐ I use good sentences and paragraphs.

☐ My spelling is good.

MATHEMATICS

☐ I know the basic facts of addition, subtraction, multiplication, and division.

☐ I can work with whole numbers and fractions.

☐ I can use measurement numbers.

(over)

SOCIAL STUDIES

☐ I understand what we are studying and why.

☐ I can use maps and graphs.

SCIENCE

☐ I understand what we are studying and why.

☐ I know how experiments are used to test knowledge.

If you marked "N" for any of these things, write out some ways that you might help yourself to improve.

RELATED MATERIALS

Egg to Chick (Book) Millicent E. Selsam. Harper and Row, 49 East 33rd Street, New York, New York 10016, 1970.

Eggs to Market: The Story of Automated Egg Processing (Film, Color, 11-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

Focus on Self Development; Stage Three: Involvement (Multi-Media) Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611, 1973.

Incubator, The: Classroom Science (Film, Color, 12-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

Machines That Help the Farmer (Film, Color, 11-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

Story of Poultry, The (Tape) Creative Visuals, Box 1911-3, Big Spring, Texas 79720, 1971.

They Work and Serve (Books) Steck-Vaughn, P. O. Box 2028, Vaughn Building, Austin, Texas 78767, 1972.

Values Series (Films, Color, 11-min.) Bailey Film Associates, 11559 Santa Monica Boulevard, Los Angeles, California 90025, 1972.

What Is a Chicken? (Book) Gene Darby. Benefic Press, 10300 West Roosevelt Road, Westchester, Illinois 60153, 1963.

POULTRY FARMER

One-third of the farmers in the United States raise some poultry, but in 1964 fewer than 3% were classified as poultry farmers. Many poultry farms concentrate on egg production. Most of the larger and more specialized of these farms are in the Northeast and in California; others produce broilers. Many highly concentrated centers of broiler production are east of the Mississippi River and a few are on the West Coast. Turkey producers also are specialized. A concentration of specialized producers of ducks is located in Suffolk County, Long Island, New York.

A few poultrymen produce some crops for sale and purchase special poultry feeds and laying mash. Crops are not grown by most specialized poultry producers, particularly those who produce broilers or large laying flocks. Commercial poultry farmers in New Jersey, for example, buy all their feed. The typical broiler producer in Maine, the Delmarva (Delaware, Maryland, Virginia) peninsula, and Georgia devotes almost all of his capital and labor to the production of broilers.

Poultry farming requires specialized skill in handling birds, chiefly on the part of the operator. Bulk handling of feed and mechanical feeding is widespread and requires little physical strength. For these reasons, poultry farms can use available family help.

Because they have a high proportion of cash costs and a thin margin of profit, relatively small changes in prices of feed, broilers, and eggs can produce sizable fluctuations in net farm income. The incomes of most broiler producers, however, are fairly stable because they produce under contract. Contract production is more widespread in broiler production than in any other major type of farming. Under these arrangements, the financing agency (usually a feed dealer) furnishes the feed, chicks, and technical supervision--almost everything except the buildings, equipment, and direct production labor. The grower receives a stipulated amount per 1,000 birds marketed and often a bonus for superior efficiency. Many turkey producers operate under similar contracts, but these arrangements are not nearly so universal as for broilers.

Poultry farmers normally buy their chicks from commercial hatcheries. Newly-acquired chicks are kept in brooder houses for about seven or eight weeks when they are moved to shelters or open pens. Roosters are removed from the flock at about age six months and the hens begin to lay eggs.

Most of the farmer's work is in keeping his birds healthy. They must have shelter from natural enemies and from extreme weather conditions. Cleanliness is essential since diseases can endanger a flock in a very short time. Food must be provided that will allow each chicken to grow or to produce at its maximum. Meanwhile, work includes collecting and grading eggs, then candling, packing, and shipping them. Raising broilers and fryers requires housing the chickens until they are between six and thirteen weeks old. They must then be sold--either alive or plucked and cleaned. Farmers specializing in egg production gather eggs at least twice a day. Eggs must be kept reasonably cool during storage, grading, and packing.

Entry in the poultry business may be achieved by part-time work on a poultry farm as available. One may also look for work with a firm related to poultry farming, such as equipment or feed dealers. The poultryman needs to develop a thorough knowledge of his birds and their special requirements.

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 574-575.

INFLUENTIAL INGREDIENTS

SIXTH EXPERIENCE LEVEL INFUSION STRATEGY

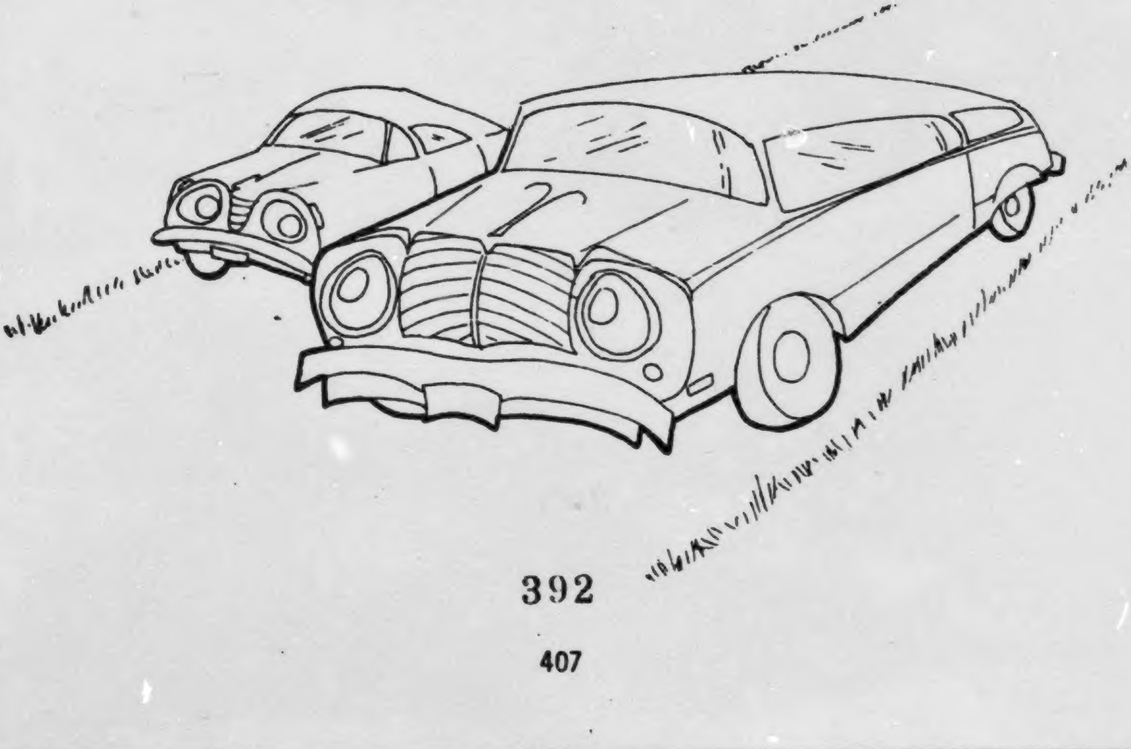
CAREER DEVELOPMENT FOCUS: An individual's values and personal goals are influenced by the values of other people.

OCCUPATIONAL FOCUS: Chef/Cook

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Menu Musings
2. Behind the Scenes
3. The Home Front



Teacher Goals

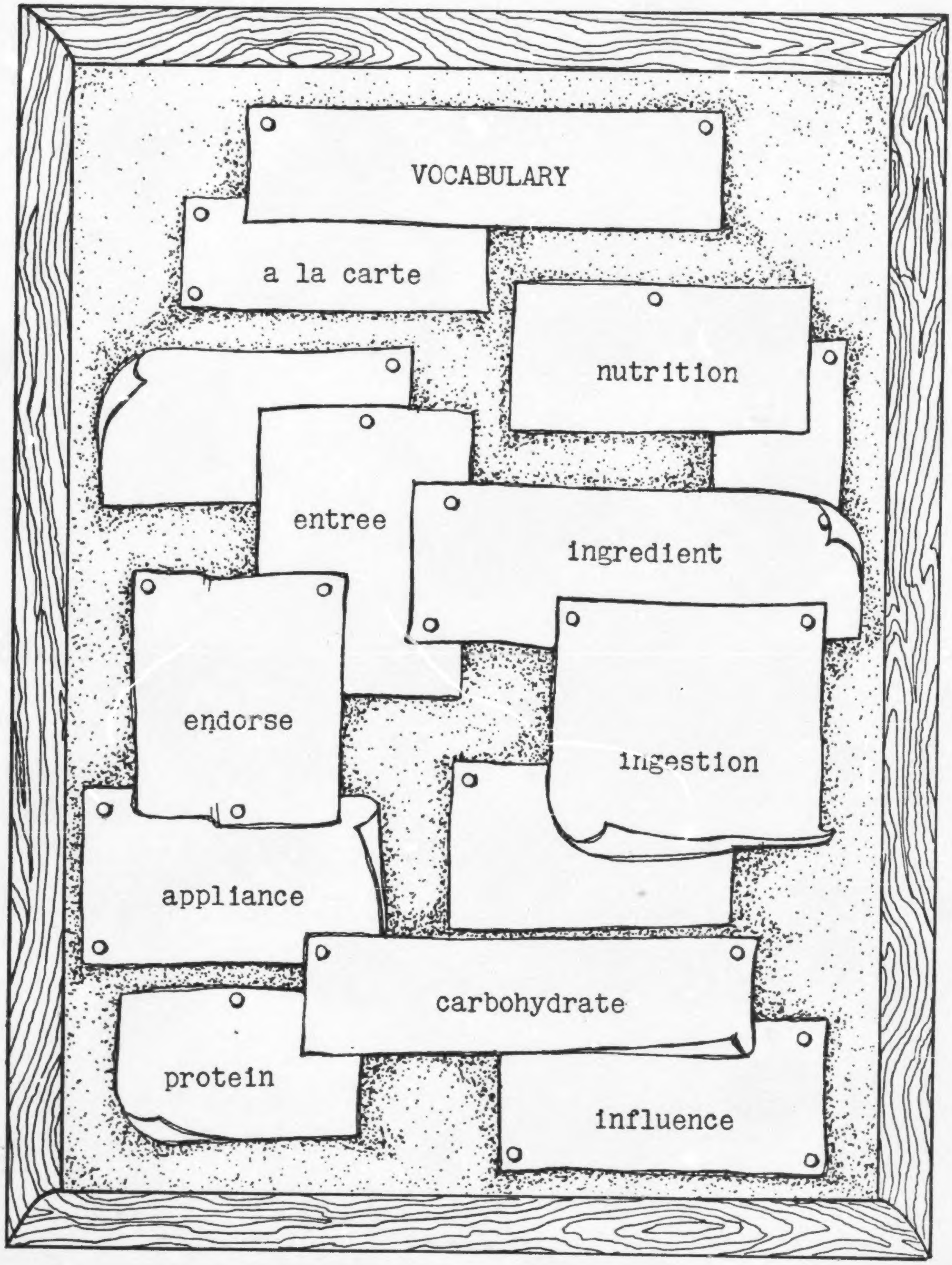
Teacher goals of this strategy combine a Self-Development Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Chef/Cook. In this perspective the teacher's goals are to:

Lead pupils to analyze how personal choices may be influenced by others.

Provide information about the role of the chef/cook in the total economy.

Structure experiences offering direct contact with adults employed in food preparation.

Direct application of pupil skills to simulated chef/cook tasks.



VOCABULARY

a la carte

nutrition

entree

ingredient

endorse

ingestion

appliance

carbohydrate

protein

influence

MENU MUSINGS

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *discuss the reasons for standards of menu preparation.*

. . . *distinguish one's own food intake for a given period of time according to personal choice and the influence of others.*

Attitudes and Appreciations Dimension

. . . *identify preparation of a menu as a societal contribution by a chef.*

. . . *describe how different modes of food services imply different mutual expectations.*

Educational Awareness Dimension

. . . *cite nutritional facts used by a chef in menu preparation.*

Subject Matter Concepts

- Science
  - Biology
    - Living things need food and water.
    - Cells develop into tissues and organs.
    - Concepts related to disease
    - Human body systems
  - Scientific Method
    - Categorizations
- Social Studies
  - Sociology-Anthropology
    - Individual characteristics
    - Values and purposes

Preplanning Suggestions

Selection of menus from nearby restaurants, magazines, cookbooks, etc.
Charts of basic food groups
Resource books and films about nutrition

MENU MUSINGS

Completion of a worthwhile task has value for the worker and for society.

Attitudes and Appreciations

An individual's values and personal goals are influenced by the values of other people.

Self-Development

A given work setting requires certain policies and procedures.

Attitudes and Appreciations

Knowledge and skills in subject matter area are helpful in occupational competence.

Educational Awareness

Adequate nutrition depends upon intelligent selection of foods. This activity deals with the purposes of such selection, particularly the influence of adult standards.

Collect a good supply of menus from local restaurants, women's magazines, etc. Pupils could be assigned to bring in lists of the foods and beverages offered by "hamburger joints" or other restaurants in the area.

. . . *identify preparation of a menu as a societal contribution by a chef.* PPO

. . . *discuss the reasons for standards of menu preparation.* PPO

. . . *describe how different modes of food services imply different mutual expectations.* PPO

Study the menus as a class or in smaller groups. Analyze their contents with respect to specific foods and beverages listed, kinds of services offered (over-the-counter, table service, carhop, etc.), and types of servings (full dinner, a la carte, short order, etc.). What are the purposes, advantages, and disadvantages of each method of preparation or service? How do these considerations reflect standards of values? What behaviors are implied for cooks, servers, and customers in each case?

. . . *cite nutritional facts used by a chef in menu preparation.* PPO

The contents of the menus should be studied from the standpoint of basic dietary needs. Help pupils identify the four basic food groups:

Meats
Breads and cereals
Dairy products
Fruits and vegetables

Discuss how and why these categories have been established. What nutritional benefits does each have to offer? Bring the ideas of carbohydrates, fats, proteins, and vitamins into consideration. Why are dietary supplements used by some people? What happens when any of the four basic food groups is neglected?

Refer to the menus collected and analyze them in terms of nutritional content. How could each be used to provide a balanced diet?

Enlarge on the responsibility of the person, or persons, who formulate menus. Sometimes this person is a trained nutrition specialist. Sometimes a hired cook does the planning. Help pupils to identify particular people, including their mothers, who plan and prepare meals for others. How does a menu set limits on choices? What are the factors (human, location, facilities, etc.) that contribute to a particular menu?

Meanwhile, clarify that "chef" can mean a person in charge of a kitchen or it can be a synonym for cook.

An individual's values and personal goals are influenced by the values of other people.

Self-Development

. . . *distinguish one's own food intake for a given period of time according to personal choice and the influence of others.* PPO

The REACT page directs the pupil to keep a record of his food and beverage intake for a week. Items are to be listed according to who made the choices. Choices are then analyzed in terms of the four basic food groups.

SD/Level 6/4

"Whose Idea Was This?"

WHOSE IDEA WAS THIS?

How often are you able to decide what you will eat or drink?

On this paper keep track of your own ingestion (a fancy word for eating and drinking) for a week. List foods and beverages in the different columns to show who made the decisions.

MY PARENTS	MYSELF	OTHER PEOPLE

(over)

From each column on the other side of this sheet organize your intake according to food groups.

	Meats	Bread and Cereals	Dairy Products	Fruits and Vegetables	Others
PARENTS					
MYSELF					
OTHER PEOPLE					

Who were the other people who may have influenced your food intake?

Whose choices gave you the most balanced diet?

Whose choices gave you the least balanced diet?

When you made your own choices, why did you choose what you did?

BEHIND THE SCENES

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *explain how a chef could be a proper person to endorse a product or to give advice.*

Attitudes and Appreciations Dimension

. . . *discuss the suitability of professional cooking for both men and women.*

Career Information Dimension

. . . *describe the food preparation area in a public dining establishment.*

Educational Awareness Dimension

. . . *cite the work of a professional cook as an example of continuing learning.*

. . . *identify knowledge and skills needed by a professional cook.*

Subject Matter Concepts

- Science
  - Scientific Method
    - Scientific knowledge accumulates.
  - Biology
    - Concepts related to microbes, disease, vaccination
    - Living things need food, air.

- Social Studies
  - Economics
    - Division of labor
    - Goods and services
    - Labor systems
    - Use of resources and capital
  - Sociology-Anthropology
    - Individual characteristics
    - Values and purposes

- Mathematics
  - Measurement
    - Precision in measuring

Preplanning Suggestions

Arrange for a visit to a food preparation area. (The school kitchen might be used.)
Resource people from the kitchen to answer questions
Books, films, and other resource materials about cooks and chefs

BEHIND THE SCENES

This activity aims to provide direct observations of food preparation areas of local dining facilities. Arrange ahead of time with some nearby public eating establishments for your pupils to visit these places. It is likely that better observations will result if smaller groups are assigned, each to visit a different place. The most important feature should be access to the food preparation and storage areas.

Occupations have their own work settings.

Career Information

. . . *describe the food preparation area of a public dining establishment.* PPO

A great many tasks can be performed by men or women.

Attitudes and Appreciations

. . . *discuss the suitability of professional cooking for both men and women.* PPO

Learning is a lifelong process.

Educational Awareness

. . . *cite the work of a professional cook as an example of continuing learning.* PPO

Alert pupils to seek information about specific conditions:

What equipment is used?
How is cleanliness maintained?
For what tasks is each person responsible?
What differences, if any, are there between the work of men and women?
How is food stored?
How is food delivered to the customer?

Encourage informal interviewing of personnel:

How long have you had this job?
How did you secure the job?
What new things have you learned since taking this job?
What do you like best (and least) about your job?

Have each group report their findings

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

An individual's values and personal goals are influenced by the values of other people.

Self-Development

to the class. Compare the reports and analyze whatever similarities and differences may appear.

Which places seemed to keep their employees longer?
Which ones required some kind of uniform?
How did the numbers of employees vary?
What were the apparent ages of the employees?
(etc.)

. . . *identify knowledge and skills needed by a professional cook.* PPO

. . . *explain how a chef could be a proper person to endorse a product or to give advice.* PPO

Use the information gathered to consider the authoritative position of a professional cook. What advice might we seek from a chef? What are the sources of his knowledge? How do his values, tastes, and aptitudes influence his judgments? What topics would you not consider asking him about? Why not?

The REACT page continues into the self-development subconcept of the influence of other persons on one's own values and goals. The pupil is directed to list and describe endorsements attributed to persons as they appear in mass media. Clarify "endorse" and "medium" as they apply to these advertising techniques. Stress the idea of influence of peers and other significant persons in making one's own decisions.

SD/Level 6/5

"Take My Word For It"

TAKE MY WORD FOR IT

Advertisers often try to get famous people to endorse their products.

On this page, list examples of endorsements that you have seen or heard.

Tell who did the endorsing, what the product was, and where the endorsement appeared.

THIS PERSON	endorsed THIS PRODUCT	in THIS MEDIUM

Sometimes we like to give "endorsements" to our friends.

Sometimes they like to offer us advice or suggestions.

On this page, tell about a time that you gave or received some kind of "endorsement."

Who were you talking with?

Which of you gave the "endorsement?"

What was the advice or suggestion that was given?

Was the advice followed?

Was the result satisfactory?

THE HOME FRONT

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *identify parental values as essential factors in one's own well being.*

Attitudes and Appreciations Dimension

. . . *discuss possible effects of one's mother not being able to prepare a particular meal.*

Career Information Dimension

. . . *describe the kitchen in one's own home as a chef's work setting.*

. . . *identify homemaking as a bona fide career.*

. . . *tell about at least two kitchen instruments or appliances used by one's mother.*

Educational Awareness Dimension

. . . *tell how one's own mother developed kitchen management skills.*

Subject Matter Concepts

Social Studies
  Sociology-Anthropology
    Membership in a group
    Individuality and responsibility
    Values and purposes
    Technology produces changes in ways of living.
    Similar basic needs

Preplanning Suggestions

Plan visits to the classroom of panels of persons who prepare the meals in the homes of children in the group.

Bulletin board displays of kitchen equipment for commercial establishments and homes

THE HOME FRONT

Occupations have their own work settings.

Career Information

Earnings vary with occupations.

Career Information

Work involves the acceptance of responsibility for a task.

Attitudes and Appreciations

Career-oriented learning may take place in school or out of school.

Educational Awareness

The most important chef in any child's life is the person who prepares his daily meals. This is most likely to be the mother but may be father or someone else. Invite a few mothers (or "others") to serve as a panel to discuss their own activities and standards in planning and preparing foods for their families.

(NOTE: The term "mother" is used for convenience in the following objectives. Naturally, allow for those cases in which a different person prepares most of the meals. This may also be an opportunity to de-stereotype the woman as "only a housekeeper." In any case, stress the positively essential role of whoever it is who prepares food for others.)

. . . *describe the kitchen in one's own home as a chef's work setting.* PPO

. . . *identify homemaking as a bona fide career.* PPO

. . . *discuss possible effects of one's mother not being able to prepare a particular meal.* PPO

. . . *tell how one's own mother developed kitchen management skills.* PPO

Brief parents ahead of time about the general and specific purposes for the panel activity. These should include such items as:

menu preparation
use of appliances
consideration of individual tastes and needs
shopping lists
cleaning and maintenance tasks
use of arithmetic and reading
one's own history of learning kitchen management skills

An individual's values and personal goals are influenced by the values of other people.

Self-Development

Occupations require the use of specific materials and equipment.

Career Information

Anticipate using the panel both as a source of information and as motivation for later discussion or study into whatever topics may generate interest.

> . . . *identify parental values as essential factors in one's own well being.* PPO

A helpful follow-up would be a panel of fathers. This could consider their concerns with family feeding in particular and/or the larger context of family well being. Do any of the fathers ever do any cooking or other food preparations? What is their role, if any, in menu planning? If mothers also work outside the home, what effect does this have on meal preparation and other essential household activities?

> . . . *tell about at least two kitchen instruments or applicances used by one's mother.* PPO

The REACT page directs the pupil to list articles of equipment that are available in his kitchen at home. How far this activity goes beyond mere listing can depend upon teacher choice and individual differences among the children.

SD/Level 6/6

"Kitchen Equipment"

KITCHEN EQUIPMENT

When someone mentions kitchen equipment, the first three things that probably come to your mind are a stove, a refrigerator, and a sink.

These are certainly important things every day of the year, but take a closer look around the kitchen for other tools, instruments, and appliances that help in the preparation of your family's meals.

WHAT ELECTRICAL APPLIANCES ARE THERE?	WHAT DOES EACH ELECTRICAL APPLIANCE DO?

WHAT MEASURING INSTRUMENTS ARE THERE?

WHAT TOOLS ARE THERE THAT ARE USED BY HAND?

WHAT BOOKS, OR OTHER SOURCES OF INFORMATION, ARE KEPT IN THE KITCHEN?

RELATED MATERIALS

Betty Crocker's New Boy's and Girl's Cookbook (Book) Golden Press, 850 Third Avenue, New York, New York 10022, 1972.

Cooperation, Sharing, and Living Together (Multi-Media) Educational Projections Corporation, 1911 Pickwick Avenue, Glenview, Illinois 60025, 1971.

Developing Your Personality (Filmstrip) Encyclopaedia Britannica Educational Films, Inc., 425 North Michigan Avenue, Chicago, Illinois 60611, 1970.

Digestive System, The (Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Digestive System, The (Book) Dr. Alvin Silverstein and Virginia B. Silverstein. Prentice-Hall, Inc., Englewood Cliffs, New Jersey 07632, 1970.

Eating and Cooking Around the World (Book) Erick Berry. The John Day Company, 62 West 45th Street, New York, New York 10036, 1963.

Foods (Book) Bertha Morris Parker. Row Peterson and Company, Evanston, Illinois 60204, 1960.

Foods We Eat, The (Sound Filmstrip) Society for Visual Education, 1345 Diversey Parkway, Chicago, Illinois 60614, 1971.

Lessons in Living for Young Homemakers (Book) Peeler Davis. Ginn and Company, 191 Spring Street, Lexington, Massachusetts 02173, 1972.

Plants That Feed the World (Book) Rose E. Frisch. D. Van Nostrand Company, Inc., Princeton, New Jersey 08540, 1966.

CHEF/COOK

The nature of a cook's job depends partly on where he works. There is a good deal of difference in preparing food for students in a high school cafeteria, for passengers on a jet airliner, or for patients in a hospital. The size of the establishment in which a cook works is of equal importance. In small restaurants, one cook, perhaps aided by a short order cook and one or two kitchen helpers, may prepare all the foods served. Often the menu consists of a few dishes prepared on a short order basis, plus pies and other baked goods purchased form a local bakery. Large eating places are more likely to have varied menus and to prepare all of the food served. The kitchen staff in a large establishment often includes several cooks and many kitchen helpers. Each cook usually has a special assignment and often a special job title. The head cook or chef coordinates the work of the kitchen staff and is almost always a highly skilled cook who often may take direct charge of certain kinds of food preparation. Some chefs may acquire substantial reputations for themselves and for the restaurants and hotels where they work.

In 1968, most cooks and chefs were employed in restaurants, but many worked in public and private schools and in hotels and hospitals. Railroad dining cars, ocean liners, government agencies, private clubs, and other kinds of establishments also employed cooks and chefs.

Most cooks learn their skills on the job. Sometimes they are trained as apprentices under trade union contracts or the training programs which some large hotels and restaurants conduct for their new employees. Courses in restaurant cooking can be helpful for young people seeking jobs in large restaurants and hotels. Many vocational schools offer varied programs of training to high school students. Other courses open in some cases only to high school graduates and ranging from a few months to two years or more in length are given under the auspices of restaurant associations, hotel management groups, trade unions, and in technical schools and colleges. In addition, programs to train unemployed workers for jobs as bakers and various types of cooks were operating in several cities in 1968.

Unexperienced cooks usually are assigned as helpers until they acquire sufficient skills. Many cooks obtain higher paying positions and acquire new cooking skills by moving from place to place. Some eventaully go into business for themselves as caterers or restaurant proprietors; others may become instructors at vocational schools and other institutions.

Cleanliness, the ability to work under pressure during busy periods, physical stamina, and a keen sense of taste and smell are among the important qualifications needed for this occupation. A cook or chef in a supervisory position not only must be an expert cook, but also must be able to organize and direct kitchen operations effectively. Health certificates, indicating freedom from communicable diseases, are required by law in many states.

The number of cooks and chefs is expected to rise rapidly in the 1970's as new establishments are opened. Small restaurants and other eating places where the food preparation is fairly simple will offer most opportunities for starting jobs. Beginners will also find starting positions in hotel and restaurant kitchens where foods are prepared more elaborately. The shortage of skilled cooks and chefs is acute and employment opportunities for well qualified beginners will be good.

Wages vary greatly according to geographical location and type of establishment. In large restaurants and hotels many cooks earn considerably more than minimum rates. In addition to wages, restaurant cooks usually receive at least one free meal a day and are furnished with uniforms. Paid vacations and holidays are common, and various types of health insurance programs are also provided. Scheduled hours in restaurants include late evening, holiday, and weekend work and range from 40 to 48 hours a week.

Many kitchens in which these workers are employed are air conditioned, have convenient work areas, and are furnished with modern equipment and labor-saving devices. Others are less well equipped. In kitchens of all kinds, however, cooks often may be required to lift heavy pots and other objects or work near hot ovens or ranges.

The principal union organizing cooks and chefs is the Hotel and Restaurant Employees and Bartenders International Union.

Adapted from: Occupational Outlook Handbook, 1970-71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 325-328

KEEP ON TRUCKIN'

SIXTH EXPERIENCE LEVEL INFUSION STRATEGY

CAREER DEVELOPMENT FOCUS: There is a relationship among interests, aptitudes, achievements, values, and occupations.

OCCUPATIONAL FOCUS: Truck Driver

ACTIVITIES

IN THIS INFUSION STRATEGY

1. Some Horses' Mouths
2. Over-the-Road
3. Rules of the Road

Teacher Goals

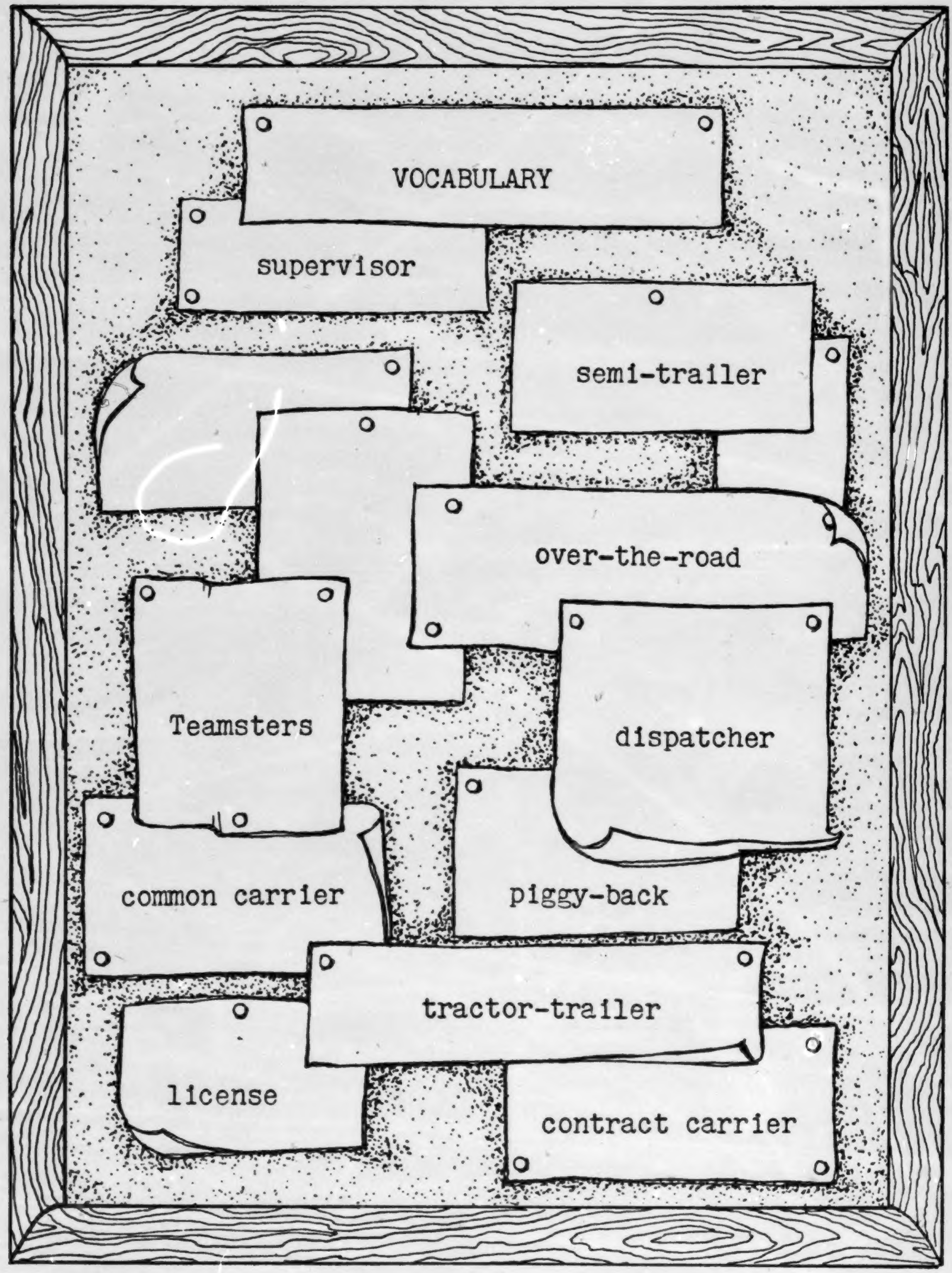
Teacher goals of this strategy combine a Self-Development Dimension subconcept with subconcepts from Attitudes and Appreciations, Career Information, and Educational Awareness, and subject matter concepts for the occupation of Truck Driver. In this perspective the teacher's goals are to:

Enhance pupil appreciation of how certain abilities and knowledge they have now are part of certain occupational requirements.

Expand pupil knowledge with respect to the role of trucking and its part in the total economy.

Provide opportunity for pupils to meet and talk with professional truck drivers.

Structure learning experiences for applying academic skills to particular tasks related to truck driving.


VOCABULARY
supervisor
semi-trailer
over-the-road
Teamsters
dispatcher
common carrier
piggy-back
tractor-trailer
license
contract carrier

SOME HORSES' MOUTHS

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *identify specific achievements required for becoming a truck driver.*

. . . *cite reasons why at least two truck drivers chose and stayed with their jobs.*

Attitudes and Appreciations Dimension

. . . *discuss the employment possibilities for women as truck drivers.*

Career Information Dimension

. . . *summarize the occupational preparation experienced by at least two truck drivers.*

Educational Awareness Dimension

. . . *cite the work experience of a truck driver as an example of continuing learning.*

. . . *relate one's own learning achievements to requirements for truck driving.*

Subject Matter Concepts

- Social Studies
  - Economics
    - Division of labor
    - Goods and services
    - Transportation of goods
    - Interdependence
  - Sociology-Anthropology
    - Community's wants and needs
    - Dependence on others

- Language Arts
  - Listening and Speaking
    - Listen for comprehension
    - Discussion skills
    - Interviewing
  - Writing Skills
    - Characterization and plot
    - Descriptions

Preplanning Suggestions

Interview truck drivers in class.
Materials to prepare lists for the variety of tools, objections, likes, etc. of truck drivers
Tape recorder to tape the interviews

SOME HORSES' MOUTHS

There is a relationship among interests, aptitudes, achievements, values, and occupations.

Self-Development

Learning is a lifelong process.

Educational Awareness

Career development includes progression through stages of educational and occupational training.

Career Information

A great many tasks can be performed by men or women.

Attitudes and Appreciations

Invite two truck drivers to visit the classroom and discuss their jobs. Prepare with them to cover particular aspects of their work. Minimal topics should include:

education standards
other training requirements
mechanical knowledge
physical endurance and strength
duties other than driving

. . . *identify specific achievements required for becoming a truck driver.* PPO

. . . *cite the work experience of a truck driver as an example of continuing learning.* PPO

. . . *summarize the occupational preparation experienced by at least two truck drivers.* PPO

Help pupils to anticipate an active learning experience by planning an agenda together. Besides condsidering seating arrangements and introductions, outline some basic questions for specific pupils to ask. For instance, the idea of preparation and continuing learning could be used as a general framework. Include different types of knowledge and know-how--academic, mechanical, interpersonal--plus physical dexterity and stamina.

How did each of the drivers achieve beginning competence?
What further learnings have occurred since taking this job?
What other people do they normally work with or meet during their work?

. . . *discuss the employment possibilities for women as truck drivers.* PPO

Occupations require the use of specific materials and equipment.

Career Information

. . . list materials and equipment normally handled by a particular truck driver. PPO

One concentration during the discussion should deal with the material objects with which each driver must operate during his work. What duties other than actual driving may be required? These can range from the whole truck itself to tools and other equipment that may be involved. These considerations may relate the women's opportunities for employment as truck drivers. Also, what personal opinions about their jobs do the drivers have? How do their likes and dislikes compare with those of the pupils--especially the girls? What union rules are there regarding women truck drivers? What other influence do the unions have?

There is a relationship among interests, aptitudes, achievements, values, and occupations.

Self-Development

. . . cite reasons why at least two truck drivers chose and stayed with their jobs. PPO

Another key to appreciation of any occupation is how and why people actually take and keep their jobs. At what points were decisions made? What reasoning went into those decisions? What would they have done differently? Do they intend to stay with their present job--why, or why not?

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

. . . relate one's own learning achievements to requirements for truck driving. PPO

After the visitors have gone, invite children to express their own feelings about the possible attractions of truck driving as a career. Which kind of driving jobs seem to relate to their interests and aptitudes?

The REACT page invites imaginative writing. Pupils are directed to invent a "super truck driver" in the Paul Bunyan style. Some review of tall tales heroes would help to get things started. Allow for the possibility for a woman to be the super driver.

SD/Level 6/ 7

"Super Trucker"

SUPER TRUCKER

You have probably heard about Paul Bunyan, the super woodsman,

or, Pecos Bill, the super cowboy,

or, John Henry, the super railroad worker,

or, Old Stormalong, the super sailor.

These characters are the heroes of tall tales. They can do everything in their work bigger and better than normal people.

What do you suppose a super truck driver would be like?

What adventures might a super truck driver have?

How would a super trucker treat a truck?

What would other truck drivers think about the super trucker?

How would the super trucker become a truck driver in the first place?

What would the super trucker's name be?

ORGANIZE THESE IDEAS AND ANY OTHERS YOU MIGHT THINK OF AND WRITE A TALL TALE ABOUT A SUPER TRUCK DRIVER.

OVER-THE-ROAD

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *describe one's own feelings about doing this activity as a member of a group.*

Attitudes and Appreciations Dimension

. . . *discuss a truck driver's flexibility in time scheduling.*

Career Information Dimension

. . . *use terms connected with driving properly in conversation.*

Educational Awareness Dimension

. . . *apply map reading skills to the work of a truck driver.*

. . . *cooperate with classmates in mastering the uses of road maps.*

Subject Matter Concepts

- Mathematics
  - Problem Solving
    - Estimating outcomes
    - Ratio
    - Multiple-step problems
    - Money concepts
  - Figural
    - Graphs

- Social Studies
  - Geography
    - Trace routes on maps.
    - Scale of miles
    - Map keys
  - Sociology-Anthropology
    - Membership in a group
    - Individuality and responsibility

- Science
  - Scientific Method
    - Categorization

Preplanning Suggestions

Supply of road maps
Price lists for fuels used by trucks
Price lists of average food and lodging costs for truck drivers
Visuals of the variety of kinds of trucks

OVER-THE-ROAD

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

Learning achievement depends upon effort and ability.

Educational Awareness

Occupations have their own vocabularies.

Career Information

Most occupations include common expectations such as punctuality, dependability, and avoidance of excessive absence.

Attitudes and Appreciations

This activity aims for practice in reading maps, tracing routes, and estimating travel expenses. Collect a good supply of up-to-date road maps. Give pupils an opportunity to become familiar with the maps and to help each other make sure they know how to read them.

. . . *apply map reading skills to the work of a truck driver.* PPO

. . . *cooperate with classmates in mastering the uses of road maps.* PPO

. . . *use terms connected with truck driving properly in conversation.* PPO

Discuss the tracing of a route on a road map as an essential skill for an over-the-road truck driver. Clarify children's ability to determine distances and to calculate rate of speed and time with respect to specific distances. (In addition, travel costs related to miles per gallon of gasoline and for meals and lodging may be estimated.)

. . . *discuss a truck driver's flexibility in time scheduling.* PPO

"Take" the class along a prepared route to illustrate the concepts of mileage, miles per hour, and time which they can apply to a particular travel schedule. Reinforce the ideas by changing either the rate of speed or the time for a given distance. Likewise, calculate time needed for different distances. How could a truck driver adjust his timing while traveling? Why might he want to or need to?

Divide the class into groups of three or four to work together in planning a truck run with one or more road maps. The finished product should include written records of cities visited, mileage traveled, time elapsed, average rates of speed, and estimated costs of food and lodging. These results could be posted on a bulletin board and/or reported orally to the class.

There is a relationship among interests, aptitudes, achievements, values, and occupations.

Self-Development

. . . *describe one's own feelings about doing this activity as a member of a group.* PPO

Discuss the pros and cons of this kind of activity as a group effort. What difficulties arose? What advantages were experienced? If we go through the activity again, which pupils would prefer to work alone? Why? What reasons do the others have for preferring group work?

The REACT page directs the pupil to tally observations of trucks operating nearby. Be sure that tallying is understood plus the notations of time and place. Discuss, also, how to identify the different kinds of trucks. The data from the check lists could be made into graphs for comparison of different locations and times.

SD/Level 6/ 8

"Truck Tally"

TRUCK TALLY

What kinds of trucks operate near your home?

Choose a busy street corner, a place along a highway, or some other location where you are likely to see different kinds of trucks.

Use the check list below to keep track of the kinds of trucks that you see.

Blank spaces can be used for other kinds not on the list.

MAIL TRUCKS	
PANEL DELIVERY TRUCKS	
PICK-UP TRUCKS	
LIVESTOCK TRUCKS	
MOVING VANS	
TANK TRUCKS	
SEMI-TRUCKS	
TRANSPORT TRUCKS	
DUMP TRUCKS	
STREET MAINTENANCE TRUCKS	

Where did you make your observations?

What was the date?

At what time did you start? When did you leave?

RULES OF THE ROAD

Sixth Experience Level Activity

Performance Objectives

Self-Development Dimension

. . . *categorize a list of occupations with respect to one's interests at this time.*

Attitudes and Appreciations Dimension

. . . *discuss the needs for particular trucking regulations.*

Career Information Dimension

. . . *relate at least two school learning experiences to truck driving competence.*

. . . *use terms about trucks and trucking properly in conversation.*

Educational Awareness Dimension

. . . *identify at least two truck regulations for one's own state.*

Subject Matter Concepts

- Social Studies
  - Political Science
    - Government services
    - Laws regulate behavior.
  - Sociology-Anthropology
    - Technology changes ways of living.
    - Community's wants and needs

Preplanning Suggestions

Driver's and trucker's license information from several states
Drivers' and owners' manuals
Books and visuals about trucks and truckers

This activity requires a supply of official information regarding regulations affecting the operation of trucks. One likely place to secure such materials is the agency of your state government that regulates vehicle licensing. Another possibility is the nearest drivers' license examination office. In any case, ask for the regulations that determine such items as:

size of trucks
weight allowances per axle
brake requirements
use of trailers
licensing
registration
safety tests
emergency procedures

Drivers' or owners' manuals may also provide helpful information.

Knowledge and skills in subject matter areas are helpful in occupational competence.

Educational Awareness

. . . *identify at least two truck regulations for one's own state.* PPO

Career development includes progression through stages of educational and occupational training.

Career Information

. . . *relate at least two school learning experiences to truck driving competence.* PPO

A given work setting requires certain policies and procedures.

Attitudes and Appreciations

. . . *discuss the needs for particular trucking regulations.* PPO

Occupations have their own vocabularies.

Career Information

. . . *use terms connected with truck driving properly in conversation.* PPO

In addition to whatever official information has been procured, encyclopedia articles and other library books can be helpful sources of facts and figures.

Use the available information as a basis for speculating about the reasons for particular regulations.

Why are the dimensions of trucks limited?
Why are some trucks required to stop at railroad crossings?
How are a trailer and a semi-trailer different?
What are the relationships of axles to gross weight?
How are interstate and intrastate traffic affected by laws?
Why are weighing stations located along the highways?
Why are speed limits for trucks different from those for passenger cars?

Help children relate their academic skill subjects, as well as knowledge, to the practical needs of a truck driver. Bring out specific applications of reading, spelling, arithmetic, and writing to the understanding and following of rules and regulations. (How are these ideas similar to being able to understand and follow rules and regulations in other walks of life?)

There is a relationship among interests, aptitudes, achievements, values, and occupations.

Self-Development

. . . categorize a list of occupations with respect to one's interests at this time. PPO

The REACT page deals directly with the self-development subconcept. Interests are invited with respect to specific occupations. The "because" column should involve references to aptitudes and values as possible reasons for interests.

SD/Level 6/9

"Yes or No and Why"

YES OR NO AND WHY

Here is a list of jobs in which you might be interested.

If, at this time, you think you have some interest in that job, check the YES column and then tell why.

If you don't feel interested in that particular job, check the NO column and then tell why not.

JOB	YES	NO	BECAUSE
Over-the-Road Truck Driver			
Local Truck Driver			
Oceanographer			
Sales Clerk			
Poultry Farmer			
Medical Doctor			
Conservationist			
Airline Pilot			
Accountant			
Carpenter			
Cook			
Musician			

RELATED MATERIALS

Building Work Habits Series (Filmstrips) McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, New York 10020, 1967.

Guidance and Personal Development (Multi-Media) Imperial Film Company, Inc., Educational Development Corporation, Post Office Drawer 1007, Lakeland, Florida 33803, 1973.

I Want t[illegible] a Truck Driver (Book) I. Wilde and G. Wilde. Childrens Press, [illegible]24 West Van Buren Street, Chicago, Illinois 60607, 1958.

Tra[illegible]rtation and Transportation Workers (Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1972.

Truck Drivers: What Do They Do? (Book) Carla Greene. Harper and Row, 49 East 33rd Street, New York, New York 10016, 1971.

Trucks (Book) Herbert Zim and James Skelly. William Morrow and Company, 105 Madison Avenue, New York, New York 10016, 1970.

Trucks in Our Neighborhood (Film, Color or B/W, 12-min.) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

VIP Who Work With Cars, Buses, and Trucks (Book) Freeman, Westover, and Willis. Childrens Press, 1224 West Van Buren Street, Chicago, Illinois 60607, 1973.

What You'd See at the Bus and Truck Terminals (Sound Filmstrip) BFA Educational Media, 2211 Michigan Avenue, Santa Monica, California 90404, 1971.

You and Transportation (Filmstrip) Eye Gate House, 146-01 Archer Avenue, Jamaica, New York 11435, 1965.

You Can Work (Books) Betty W. Dietz. Steck-Vaughn, P. O. Box 2028, Vaughn Building, Austin, Texas 78767, 1970.

TRUCK DRIVERS

Truck drivers operate either over-the-road (long haul) or locally within a particular community. Most over-the-road drivers operate gasoline or diesel powered tractor-trailers and frequently do much night driving. Loading and unloading may or may not be a part of the over-the-road driver's work. He must be able to maneuver the trailers while driving in reverse as well as judge distance accurately while driving around corners or through narrow places. Safe driving and courtesy are extremely important, as are safety precautions with respect to both cargo and the vehicles themselves.

Over-the-road drivers are employed by private and for-hire carriers. Private carriers are companies which use their own or leased trucks to transport their goods. For-hire carriers are either common carriers (trucking companies serving the general public) or contract carriers (trucking firms hauling goods under contract for certain companies). Although drivers on long intercity runs are employed more often by common carriers, an increasing number in recent years have been working for private or exempt (from USDT regulation) carriers or for specialized carriers handling large pieces of machinery, explosives, or missiles.

Minimum qualifications for interstate over-the-road drivers are established by the USDT. The driver must be at least 21 years old, able-bodied, with good hearing and vision of at least 20/40 with or without glasses. He must be able to read and speak English, have at least one year's driving experience and a good driving record. Most states require truckdrivers to have a chauffeur's license. Most fleet operators have higher hiring standards than governmental minimums. Tractor-trailers usually cost between $25,000 and $40,000, and the load inside may be worth more than $100,000. The owners of such valuable equipment employ experienced drivers who also can accept great responsibility. Practical knowledge of automotive mechanics is certainly helpful in addition to other considerations.

Most long-haul drivers have had experience in local trucking. Applicants are required to pass a physical examination, and many firms also give written tests of traffic and driving knowledge. Most employers, and some states, also require a road test for drivers of tractor-trailers. A few drivers may advance to jobs as safety supervisors, driver supervisors, and dispatchers. However, these jobs are often unattractive since the starting pay is usually less than a driver's pay. Most drivers can expect to advance only on the basis of seniority to driving runs that provide increased earnings or preferred schedules and working conditions.

Employment of over-the-road truck drivers is expected to increase moderately during the 1970's, with some 8400 new openings per year. General economic growth has resulted in more demand for freight--especially in areas not served well by railroads. Improvements in highway construction and in trailer design also are encouragements. For example, the use of "double-bottoms" (two trailers hitched in tandem to a tractor) simplifies loading and unloading procedures. The over-the-road driver has a better chance of remaining employed during business recessions than workers in many other occupations.

The salary rates of over-the-road drivers are fairly uniform because this is a highly unionized field, and union-employer contracts are generally master agreements covering all employers within a region. Drivers on longer runs generally are paid on a mileage basis for actual driving time. For all other time during which the driver is required to be on duty, he is paid at an hourly rate. Motor carriers engaged in interstate or foreign commerce are subject to the USDT rules governing hours of work and other matters. For example, no driver may be on duty for more than 60 hours in any 7-day period, but for carriers operating every day of the week, the driver may remain on duty for a maximum of 70 hours in any period of eight consecutive days. A workweek of at least 50 hours is very common. Over-the-road drivers often must spend time away from home. Some companies use two-man sleeper teams on very long runs. The physical strain of long distance driving has been reduced by more comfortable interiors, better highways, and more stringent safety regulations.

Local truck drivers move goods from terminals, warehouses, etc., to wholesalers, retailers, and consumers in the local area and must be especially skilled in dealing with congested city traffic conditions. Loading and unloading are often done by platform, but the driver himself may also be expected to help. At delivery points, the driver gets customers to sign receipts and freight bills, and he sometimes collects money for freight, c.o.d., or other charges.

A large majority of local drivers work for businesses which deliver their own products and goods. Many others are employed by local for-hire operators, which serve the general public or specific companies under contract. Some work for the federal government, particularly the Post Office Department and for states and municipalities. A large number are in business for themselves.

Qualifications for local truck drivers vary considerably depending upon factors such as the type of equipment to be operated and the nature of the business. Generally, applicants must be at least 21 years old, able to lift heavy objects, and otherwise in good health. Good hearing and good vision (with or without glasses) and tact and courtesy in dealing with people are also normal expectations. Besides having a chauffeur's license, an applicant's driving ability and knowledge are also likely to be tested directly. Training for new drivers is often informal but may include a short indoctrination course. Local truck drivers may get jobs as dispatchers or advance to such jobs as terminal managers, supervisors, or traffic work. An experienced driver who has some business ability and ambition can start his own trucking company when he has sufficient capital. Truckers who own one or two vehicles continue to account for a sizable proportion of local for-hire trucking business.

Job openings for local truck drivers are expected to average more than 15,000 per year. Since trucks carry virtually all freight for local distribution and do not compete for hauling with other types of carriers, the anticipated increase in volume will expand local trucking business.

As a rule, local truck drivers are paid by the hour, with extra pay for overtime over 40 hours. The actual operation of a truck has become physically less demanding, but the driving in heavy traffic can still be exhausting. Local drivers usually work a regular daytime schedule and return home in the evenings.

Most truck drivers, over-the-road and local, belong to unions--the great majority to the International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America (Ind.). Some belong to unions representing the plant workers of their employers.

Adapted from: Occupational Outlook Handbook, 1970 71 edition.
U. S. Department of Labor, Washington, D. C.
pp. 415-422.

Appendix A

CAREER DEVELOPMENT MAJOR CONCEPTS

Attitudes and Appreciations

Society is dependent upon the productive work of individuals.

Career Information

Basic career information will aid in making career-related decisions.

Coping Behaviors

Certain identifiable attitudes, values, and behaviors enable one to obtain, hold, and advance in a career.

Individuals can learn to perform adequately in a variety of occupations and occupational environments.

Decision Making

Life involves a series of choices leading to career commitments.

Basic components of the decision-making process can be applied to the establishing of personal goals and the making of career-related decisions.

Educational Awareness

Educational skills and experiences are related to the achievement of career goals.

Lifestyle

Work affects an individual's way of life, in that a person is a social being, an economic being, a family being, a leisure being, and a moral being.

Self-Development

An understanding and acceptance of self is important.

Social, economic, educational, and cultural forces influence self-development.

Individuals differ in their interests, aptitudes, values, and achievements.

Appendix B

DEVELOPMENTAL DIMENSIONS
SCOPE AND SEQUENCE

DIMENSION	MAJOR CONCEPT	SUBCONCEPTS FOR EXPERIENCE LEVELS READINESS THROUGH SIXTH						
		READINESS LEVEL	FIRST LEVEL	SECOND LEVEL	THIRD LEVEL	FOURTH LEVEL	FIFTH LEVEL	SIXTH LEVEL
COPING BEHAVIORS	Certain identifiable attitudes, values, and behaviors enable one to obtain, hold, and advance in a career.	An individual should learn to cope with authority exercised by others.	An individual should learn to cope with the rights and feelings of others.	An individual should learn how to give and take criticism.	A contribution to group effort can be made by demonstrating ability to both compromise and exercise influence in achievement of group goals.	Certain behaviors are appropriate to specific job settings.	There is a universality of feelings and aspirations of all people--regardless of physical appearance, nationality, creed, sex, or ethnic background.	There are effective interpersonal relations skills for giving or evaluating instructions.
	Individuals can learn to perform adequately in a variety of occupations and occupational environments.	Different skills are required for different tasks.	Several skills may be required to perform a given task.	Some skills can be transferred from one job to another.	Performance requirements for a job vary with the work setting.	Performance requirements for a job may change with time.	It is important for a person to be able to make the transition from one job to another.	There are characteristics which differentiate between occupations--both within and between job families.
DECISION MAKING	Life involves a series of choices leading to career commitments.	Choice means "making up one's mind" and there are certain situations where one can make choices.	Things change and these changes influence the choices and decisions one makes.	An individual's decisions affect himself and others.	People change and these changes influence the choices and decisions one makes.	Decision making involves risks.	Decision making can precipitate chain reactions.	Previous decisions, peers, gratifications, needs, interests, and career information influence present and future decisions.
	Basic components of the decision-making process can be applied to the establishing of personal goals and the making of career-related decisions.	An individual should recognize what "a goal" is and learn how to set one's own goals.	Problems which conflict with one's goals can be identified and assessed.	An individual should consider alternative ways to reach a given goal.	Decision making plays a role in the setting of immediate and long-range goals.	The decision-making process can be used to set priorities in developing personal goals.	Setting goals can be enhanced by analyzing decision-making processes.	The decision-making process can be used to determine one's preferences, at that point in time, between various job families.

Appendix B (Cont'd)

DEVELOPMENTAL DIMENSIONS
SCOPE AND SEQUENCE

DIMENSION	MAJOR CONCEPT	SUBCONCEPTS FOR EXPERIENCE LEVELS READINESS THROUGH SIXTH						
		READINESS LEVEL	FIRST LEVEL	SECOND LEVEL	THIRD LEVEL	FOURTH LEVEL	FIFTH LEVEL	SIXTH LEVEL
LIFESTYLE	Work affects an individual's way of life, in that a person is a social being, an economic being, a family being, a leisure being, and a moral being.	Most people work and there are many reasons why people work.	Family members perform work they are capable of performing, responsibilities are shared, and the family is an interdependent unit.	Lifestyles within a community differ.	Relationships exist between a person's occupation and the people with whom a person tends to associate.	Moral principles are an integral part of one's work life.	Relationships exist between desired lifestyles and career monetary rewards.	Leisure-time activities and interests may lead to a career, and one's career may, in turn, affect the amount and use of leisure time.
SELF-DEVELOPMENT	An understanding and acceptance of self is important.	Awareness of oneself within the context of the family structure is important.	An individual experiences various roles--friend, student, group member, etc.	There are certain physical, social, and emotional characteristics which make an individual unique.	An individual's feelings relative to happiness, fear, anger, loneliness, etc., are diverse.	A person's membership in a group affects the group as well as himself.	Interests and abilities mature and change as well as one's physical being.	There is a relationship between an individual's knowledge and acceptance of self and his career preference.
	Social, economic, educational, and cultural forces influence self-development.	An individual is influenced by other people.	The school can provide an opportunity to enhance self-development.	An individual's feelings and the feelings of others relate to commonly held beliefs and customs.	Groups outside of school influence an individual's personal development.	An individual is influenced by economic forces.	Changes in an individual influence his environment and changes in environment influence him.	An individual's values and personal goals are influenced by the values of other people.
	Individuals differ in their interests, aptitudes, values, and achievements.	An individual should be aware of the tasks that he performs and begin to determine his interests in these tasks.	An individual's interests, aptitudes, values, and achievements are not always the same as those of his peers.	An individual has social, physical, and intellectual aptitudes for various tasks.	Individuals differ in their physical characteristics.	Achievements in school and out of school are often dependent upon interests, aptitudes, and values.	An individual can differentiate between himself and others in terms of interests, aptitudes, values, and achievements in and out of school.	There is a relationship among interests, aptitudes, achievements, values, and occupations.

Appendix C

INTERACTING DIMENSIONS
SCOPE AND SEQUENCE

DIMENSION	MAJOR CONCEPT	SUBCONCEPTS APPROPRIATE FOR ALL EXPERIENCE LEVELS (READINESS THROUGH SIXTH)
EDUCATIONAL AWARENESS	Educational skills and experiences are related to the achievement of career goals.	Knowledge and skills in subject matter areas are helpful in occupational competence. Career-oriented learning may take place in school or out of school. Learning is a lifelong process. Learning achievement depends upon effort and ability.
ATTITUDES AND APPRECIATIONS	Society is dependent upon the productive work of individuals.	Completion of a worthwhile task has value for the worker and for society. Work involves the acceptance of responsibility for a task. A great many tasks can be performed by men or women. Most occupations include common expectations, such as punctuality, dependability, and avoidance of excessive absence. A given work setting requires certain policies and procedures. Specialized occupations result in an interdependent society.

Appendix C (Cont'd)

INTERACTING DIMENSIONS
SCOPE AND SEQUENCE

DIMENSION	MAJOR CONCEPT	SUBCONCEPTS APPROPRIATE FOR ALL EXPERIENCE LEVELS (READINESS THROUGH SIXTH)
CAREER INFORMATION	Basic career information will aid in making career-related decisions.	Occupations may have certain dress requirements. Occupations require the use of specific materials and equipment. Occupations have their own vocabularies. The individual worker determines which aspects of an occupation may be pleasant or unpleasant. Occupations have their own work settings. Occupations require special personal characteristics. Earnings vary with occupations. Career development includes progression through stages of educational and occupational training. Costs of training for occupations vary. Technological, economic, social, and political factors influence supply and demand of jobs.

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